

**ADDRESSING CONFIDENCE IN ELEMENTARY ART BY MODIFYING  
LANGUAGE WE USE ABOUT ABILITIES**

A Master's Degree Thesis by

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to

Moore College of Art & Design

In partial fulfillment of the requirements for the degree of  
MA in Art Education with an Emphasis on Inclusive Practices

Philadelphia, PA

August 2022

Accepted:

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### **Abstract**

The goal of this study was to explore how young students' use of language to talk about their abilities affects their perceptions of self in the elementary art classroom. After observing reticence and low self-esteem reported among elementary-aged students while in the process of creating works of art, the exploration, discovery, and implementation of an individualized, self-affirming strategy for recognizing and renegotiating negative internal dialogue and maladaptive behaviors occurred. The strategy, Self-Instruction (SI) refers to training focused on self-reflection and redirection of negative thinking to influence performance and self-concept (Meichenbaum, 1975). Four participants who exhibited signs of significant levels of self-doubt and the use of negative self-talk during artmaking experiences received intervention in the form of SI training. Over thirteen weeks, participants attended general art classes and weekly individual sessions. Participants were given the opportunity to practice using self-scripted language to influence problem-solving behaviors and self-concept while creating art. Data collected through observation, reflection, audio recording, documentation of artifacts, and semi-formal interviews were coded and used to analyze changes in participants' thought processes and behavior patterns over time. Attention was given to the display of confidence, independence, and perceptions of capability. It was concluded that thoughtful use of language about oneself and a supportive environment was influential in developing independence and confidence in young learners' perceptions of success in the art room.

*Key Terms: Self-doubt, Confidence, internal dialog, self-instruction, self-statements, internal beliefs, safety, independent learners, artmaking, maladaptive behaviors, elementary school*

### **Acknowledgments**

*For Pat Rampulla, who's dedication to teaching, unwavering belief in her students, and love has given me strength to fight against my own negative beliefs about my abilities.*

I would like to thank the following people and groups for their support in the development of my thesis and in my personal growth as an artist and educator.

To my parents, Michael and Deborah Drissel, and brother Adam, who made me the person I am, taught me what matters most, and reminded me to take care of myself.

To Jeannine Thompson, thank you for being you.

To Erica Varsho, thank you for your support and love.

To Mr. and Mrs. Gray, Emilie, Katie, Joe, Mike, and Bill, who helped me navigate unforeseen challenges, thank you for all of your support and kindness.

To my cohort members Cara, Danielle, Dasha, Kylie, and Lisa I am so grateful to have gone through this process with such a wonderful group of people, thank you for your kindness and support.

To my wonderful friends and family who encouraged me throughout this process.

To Amanda Newman-Godfrey and Lauren Stichter for their guidance and support and Alex Montgomery for their time and feedback.

To my colleagues for their approval and support of my thesis.

To my students, who brighten my life.

And most importantly to the participants of this study who gave of their time and effort to help me learn and help others. None of this work would have been possible without you.

Thank you again,

I hope you all remember how truly capable, and wonderful you are.

Always With Love, Tara

## Table of Contents

Title Page .....	i
Abstract .....	ii
Acknowledgments .....	iii
Table of Contents .....	iv-vi
List of Figures .....	vii-x
 <b>Chapter I: Introduction</b> .....	 <b>1-18</b>
Background to the Problem .....	1-3
Problem Statement .....	3-6
Research Question .....	6
Theoretical Framework .....	6-7
Significance of the Study .....	7-8
Limitations of the Study .....	8-11
Definitions of Terms .....	11-14
Assumptions to be Debated .....	15
Assumptions not to be Debated .....	16-17
Summary and Roadmap .....	17-18
 <b>Chapter II: Review of the Literature</b> .....	 <b>19-50</b>
Introduction .....	19-20
Self-doubt and Low Self-esteem .....	20-21
The Necessity of a Safe Environment .....	21-33
Culturally Responsive Teaching (CRT) and Positive Classroom Environment .....	22-24
How the Brain Influences the Ability to Learn .....	24-27
Considerations of Universal Design for Learning .....	27-28
Trauma-Sensitive Teaching and the Need for Safety .....	28-32
Barriers to Learning Due to Behavior .....	32-38
Awareness of Self and Behavior .....	38-40
Continuing on the Thought of Awareness, Problem-solving, and Self-talk .....	38-40
Is Self-talk Really Conducive to Learning and Performance? .....	41-43
Your Brain Means Well: What is Happening in the Brain During Stress .....	41-43
But How? Strategies for Potentially Changing Self-talk .....	43-46
Self-talk, Self-instruction and Perceived Errors .....	46-49
Gaps in the Literature .....	49-50
Summary .....	50-51
 <b>Chapter III: Methodology</b> .....	 <b>52-82</b>
Design of the study .....	52-65
Setting .....	52-54
Participants .....	55-57
Researcher Role .....	57-58



Research Procedures .....	59-60
Ethical Considerations .....	60
Researcher Biases .....	61-62
Limitations .....	63-64
Research Methods .....	65
Data Collection .....	66-75
Context .....	66-68
Literature Sources .....	68-70
Methods of Data Collection .....	70-75
Data Analysis .....	75-78
Organization of Data .....	75
Coding of Data .....	75-76
Methods of Analysis .....	76-78
Timeline for the Study .....	78-82
<b>Chapter IV: Results of the Study .....</b>	<b>83-166</b>
Overview of the Chapter .....	83
Goal of the Study .....	83-84
Notes about Setting .....	84-85
Introduction to Data Collection Process .....	85-108
Data Collection Norms .....	85-100
Introduction of Participants .....	100-108
Presentation of Data: Participant Experiences .....	108-166
Coding of Data .....	109
Blue Monster's Journey .....	110-126
Triangle's Journey .....	126-143
Pastel's Journey .....	143-157
Raptor's Journey .....	157-166
Summary of Findings .....	166
<b>Chapter V: Discussion and Implications for the Field .....</b>	<b>167-206</b>
Introduction to the Findings .....	167-193
Student Comfort and Application of SI .....	167-170
Observed Trends During the Study .....	170-189
Summary of the Results of Student's SI Use .....	189-193
Presentation of Findings .....	193-200
In the Context of the Research Question .....	193-195
In the Context of the Literature .....	195-198
In the Context of the Research Environment .....	198-199
In the Context of the Researcher as Self and Practitioner .....	199-200
Implications for the Field .....	200-202
Significance of the Findings .....	200-201
Implications of the Findings .....	201-202
Implications for Further Research: .....	202-206
Next steps: Questions for Consideration .....	202-203
Conclusion.....	204-206

<b>References.....</b>	<b>207-208</b>
<b>Bibliography.....</b>	<b>209-210</b>
<b>Appendices.....</b>	<b>211-386</b>
Appendix A: Letters of Consent & Permissions.....	211-223
Appendix B: Data Collection Protocols.....	224-237
Appendix C: Art Activities, Worksheets and Student Reflection Forms...	238-244
Appendix D: General Data Logs.....	245-252
Appendix E: Blue Monster's Data.....	253-289
Appendix F: Triangle's Data.....	299-324
Appendix G: Pastel's Data.....	325-359
Appendix H: Raptor's Data.....	360-382
Appendix I: Miscellaneous Resources Made.....	383-387

## List of Figures

Figure 1. Theoretical Framework.....	6
Figure 2. Concept Map of Key Terms .....	11
Figure 3. Concept Map of Literature Review Topics.....	20
Figure 4. Problem-Solving and Behavior .....	34
Figure 5. Self-instruction Process.....	46
Figure 6. Error Acknowledgement in Self-statements.....	47
Figure 7. Pseudonyms and Color Codes.....	57
Figure 8. Timeline for the Study.....	80
Figure 9. Site Permission Form.....	87
Figure 10. Interview I Questions.....	89
Figure 11. Observational Protocol Template.....	90
Figure 12. Art Activity Prompts.....	93
Figure 13. Student Self-assessment and Art Activity Worksheet Template.....	94
Figure 14. Examples of Blue Monster’s artwork completed over two sessions.....	95
Figure 15. Student-friendly diagram of generalized SI process for whole-class instruction.....	96
Figure 16. Student-friendly generalized scripted error self-statement / guide for whole-class instruction.....	97
Figure 17. Exit ticket questions.....	98
Figure 18. Interview II Questions.....	100
Figure 19. Pseudonyms, Color Codes, and Self-Identified Demographic Information.....	101
Figure 20. Blue Monster, Interview I, Defining an Artist, Feb. 16th, 2022.....	110
Figure 21. Blue Monster’s first set of self-statements .....	111
Figure 22. Section Example B.M. SI session, student's self-reflection data matrix.....	112
Figure 23. Blue Monster error script with notations.....	114

Figure 24. Blue Monster Self-Reflections (left) and ‘The Slump’ by (right), session #6, March 30th, 2022.....	115
Figure 25. Session 9 artwork Blue Monster April, 25th, 2022.....	116
Figure 26. Blue Monster SI self-assessment results before and after sessions.....	119
Figure 27. Example of an exit ticket by Blue Monster from April 19th, 2022.....	121
Figure 28. Blue Monster In-class Exit Ticket Summary .....	122
Figure 29. Blue Monsters drawing during Final Interview.....	125
Figure 30. Blue Monster’s Timeline.....	126
Figure 31. Triangle’s first set of self-statements.....	129
Figure 32. Triangle SI Session 1, prompt 5. Completed work (left) Self-assessment before (top right) and after creating an artwork (bottom right).....	130
Figure 33. Triangle’s work from SI session 2, mark-making exploration (left), and 3, abstract characters of worry, and a supportive friend (right).....	132
Figure 34. Triangle Error Script Example.....	133
Figure 35. Triangle session 8. First attempt at 76er’s Logo.....	134
Figure 36. Triangle session 8. Second attempt at 76er’s Logo.....	136
Figure 37. Triangle’s SI self-assessment results before and after sessions .....	137
Figure 38. Triangles In-class Exit Ticket Summary.....	138
Figure 39. Triangle’s artwork “The Lakers Logo” made during the final interview, May, 11th, 2022.....	141
Figure 40. Triangles edited version of the ability rating scale, March 30th, 2022 .....	142
Figure 41. Triangle’s Timeline Data.....	143
Figure 42. Pastel’s Self-statements for beginning an artwork or correcting an error.....	146
Figure 43. Pastel’s completed artwork in honor of her mother, SI session # 4.....	148
Figure 44. Pastel’s music inspired drawing, session # 6 (top), Session # 7 (bottom), April 2022.....	150

Figure 45. Pastel's SI Self-assessment results before and after sessions .....	151
Figure 46. Pastel's In-class Exit Ticket Summary.....	153
Figure 47. Pastel's drawing made during the Final Interview.....	156
Figure 48. Pastel's Timeline Data .....	157
Figure 49. Raptors Charizard drawing March 4th. 2022.....	159
Figure 50. Chameleon, by Raptor, March 15th, 2022.....	160
Figure 51. Examples from Session 3 Raptor, March 29th, 2022.....	161
Figure 52. Raptor's Attendance Log and Before and After Ability Scale Reports.....	164
Figure 53. Raptor's Timeline Data.....	165
Figure 54. Students Participation and Utilization of SI .....	169
Figure 55. Raptor: Observed Trends.....	171
Figure 56. Raptor: Use of SI and Negative Self-talk.....	172
Figure 57. Raptors In Class Data, Observed Changes in Behavior After Spending Extra Time with the Teacher .....	173
Figure 58. Blue Monster: Observed Trends .....	176
Figure 59. Blue Monster: Observed Changes in Behaviors and Independence while using SI...	177
Figure 60. Blue Monster: Observed Changes in Confidence and use of SI .....	178
Figure 61. Blue Monster: Changes in Negative Self-talk and Confidence during the study .....	178
Figure 62. Blue Monsters drawing from March 3rd, (top) and Self-reflection after using SI ...	179
Figure 63. Triangle: Observed Trends .....	180
Figure 64. Triangle: Observed Changes in Behaviors and Independence while using SI .....	181
Figure 65. Triangle: Observed Changes Negative Self-talk and Confidence during the study...	182
Figure 66. Triangle: Observed Changes in Confidence and use of SI .....	182
Figure 67. Triangles artworks that included materials the student had often avoided .....	183
Figure 68. Pastel: Observed Trends .....	184
Figure 69. Pastel: Observed Changes in Confidence and use of SI .....	186

Figure 70. Pastel: Observed Changes in Behaviors and Independence while using SI .....	187
Figure 71. Pastel: Observed Changes Negative Self-talk and Confidence during the study .....	187
Figure 72. Observed Changes in Negative Self-Talk while Practicing SI .....	190
Figure 73. Pastel missed trainings that affected weeks 4-6 results .....	190
Figure 74. Students Observed Changes in Independence while Practicing SI .....	191
Figure 75. Student's Reported Changes in Confidence while Practicing SI .....	192
Figure 76. Student self-statement examples, coded by themes .....	194

## CHAPTER I: INTRODUCTION

### Background to the Problem

In October of 2018, I took over the art program at Willow Tree Elementary School in Huntingdon Valley, PA, where I worked as a substitute since 2014. At the beginning of my time as the art teacher at the school, I found that my students verbally admitted a lack of confidence in their ability to create art independently. Since then, I have tried to create a more student-centered experience that allows for more independent choice in imagery, style, and material use. I have also worked to show more variety in styles and artists to create an environment that promotes my students' experimentation and personal expression and ideas. Since making these learning shifts, the climate of the art room has slowly changed, and students seem to be more open to experimentation than they had been in my early experiences in this art room. Despite changes, students' experiences with self-doubt or frustration in the art room continued as no individualized solution had arisen. I recognized that I could not remedy all the various origins of self-doubt and low self-esteem in my classroom. I have also acknowledged, however, that there are still avenues that need to be discovered for relieving anxiety and negativity in the art room to allow students to gain more confidence in their abilities.

I have focused my work on finding ways to assist students I noticed were experiencing concerning side effects of self-doubt within my classroom. These students varied by grade, age, gender, gender expression, race, and culture. Still, they are all bound by the experience of self-doubt while in the process of creating art which limits their ability to participate in class fully. Interestingly enough, students who shared this experience would often start strong, readily working to begin the process of planning out

work, but during the beginning phases of planning or production would begin to shut down, become reticent, verbally upset, begin criticizing themselves, or comparing work to others, or at times have even destroyed or otherwise discontinued their work in some fashion, giving up on themselves. These observations on my part were very painful to watch, seeing students working so hard only to turn back and find displeasure and the occasional tears, often from the same one or two students at multiple points in the year.

This experience was not only upsetting for me as a teacher, but it was troublesome for me as it reminded me extensively of my own experiences in and out of the art room that began early on in my own academic career, similar thoughts and phrases were being reflected back to me by my students. For as long as I can remember, and for various reasons, I struggled with my own self-esteem, and I had often second-guessed my abilities. Though I have overcome many of these negative experiences, I would be lying if I said these feelings and genuine struggles with self-doubt did not continue to affect me. These experiences were part of the reason I became an art teacher, as I had an art teacher at an early age who told me I was not *good enough* and *did not have talent*. That blanketed critique held me back and created an internalized feeling of incompetence that still affects my ability to make art today. If it were not for my own stubborn determination, I would have never made it past these experiences to my tenth-grade art teacher, who helped me see something very different about myself than my former teachers had. These negative ideas about art and individual abilities are experiences I wanted to be very sure I would never be the cause of. For students who already had these views present or developing, I felt very strongly about working to promote change before



these thoughts became fully internalized and damaging to students' ability to create meaningful and productive art in their lives.

This study is of high importance to me because students deserve a space where they can feel successful. With the variety and complexity of art and all its avenues and uses throughout the world, the art classroom should be a space in which all students are able to reach success through hard work and exploration. Art is also a unique area in which we can learn to study our environment, break down ideas and visuals into smaller parts, unpack big ideas, reflect on our experiences, experiment and problem solve with materials and ideas. Unfortunately, students experiencing doubt in their ability or belonging in my classroom would not be able to access these experiences, which is unacceptable.

### **Problem Statement**

Students' feelings of low self-esteem and doubt in the art classroom during prior art-making experiences limit their ability to participate in class and consistently show a need for intervention. Unfortunately, art education does not directly involve the consideration of students' emotional or cognitive well-being within the classroom or curriculum. Research shows, however, that students will learn better in environments where they feel a sense of safety and belonging (Hammond, 2015). This research suggests that students' emotional well-being within the classroom is vital for creating a productive and equitable classroom; therefore, these ideas should not be ignored, nor the full responsibility of these needs be put on a school counselor or other educators.

The process of creating artwork can be very emotional for anyone; it can easily create moments of frustration or excitement, joy, and confusion; it can prompt

experimentation and overall inspiration. The students I am focusing on in this study are students whom I have identified as consistently giving up, or showing signs of dependence during the first sign of productive struggle. Students in this subgroup may have verbally shared feelings of being incapable, 'stuck,' or 'not good' at crafting art with peers or teachers or to themselves, even after a relatively short amount of time actively working on, drafting, or producing something. In this thesis, a short amount of time actively working is defined as being within the first five to twenty minutes of beginning a task. For the purpose of this study, participants were only considered if they had shown consistent struggle with these observed behaviors and reported use of language suggesting feelings of self-doubt. These behaviors had to have been prevalent enough that the teacher-researcher had noticed and recorded instances of these maladaptive behaviors three or more times within the 2021-2022 school year. The students considered in this study had shown signs of self-doubt in their abilities and had been negatively impacted in class resulting in lost time, loss of work when experiences prompted them to discard that work, and the creation of negative social interactions with peers, as well as a negative internal space. All of these factors should be addressed in the classroom. These negative feelings about self can become internalized beliefs, leading to dependent learners and even behaviors of learned helplessness, which will keep students from embracing the art curriculum no matter how or why it may change (Hammond 2015).

Self-doubt and self-esteem need to be addressed in the art classroom. This researcher is not qualified as an art teacher to delve into the personal histories of all my students to extract why they feel the way they do; such information is private. I respect

that my students have boundaries that I do not need to interpret. Several studies by psychologist Donald Meichenbaum (1975), and his associates, have suggested ways of helping people improve performance, and change negative thought patterns and what he calls “negative self-statements” (p.131), by training participants to notice negativity in their thought patterns before creating positive “self-statements” (p.131) to replace the statements that are causing limitations (Meichenbaum & Cameron, 1974, Meichenbaum, 1975, Meichenbaum, D. H., & Goodman, J. 1971). Meichenbaums’ studies often focus on college-aged students in various fields of study, as well as other more specific clinical populations; however, this idea and process of using language may apply to a much broader group. His theories show potential for creating positive training for individuals without attempting to unpack all of the origins of their self-doubt; this would be very useful in the art room, as not all students will want or have the words needed to describe these feelings. More importantly, as their art teacher, I do not have the necessary training to conduct or help remedy such personal cognitive behaviors and emotions that may be contributing to these feelings. Using the ideas generated from his various case studies involving an intervention process he refers to as “self-instructional training procedure”(Meichenbaum, 1975, p. 136) or SI, Meichbaum was able to show growth in participants’ ability to perform tasks, self-regulate, notice behaviors, and reported changes in participants’ feelings about themselves. All of this was done through acknowledging and reframing thoughts about oneself over time with the help of a created script, rehearsal, and modeling (Meichbaum, 1975). Meichbaums’ claim, if successful in the general elementary art classroom, would allow me to try and help students work

through limiting moments and behaviors without crossing any boundaries or making my students share more than they are comfortable sharing with me.

### Research Question

Given that elementary-age students can express reticence and poor self-esteem while planning and making their art, and Meichenbaum (1975) suggests that using scripted prompts or statements can help students speak more authentically about themselves, how might art educators use this technique to help students reduce self-doubt while creating?

### Theoretical Framework

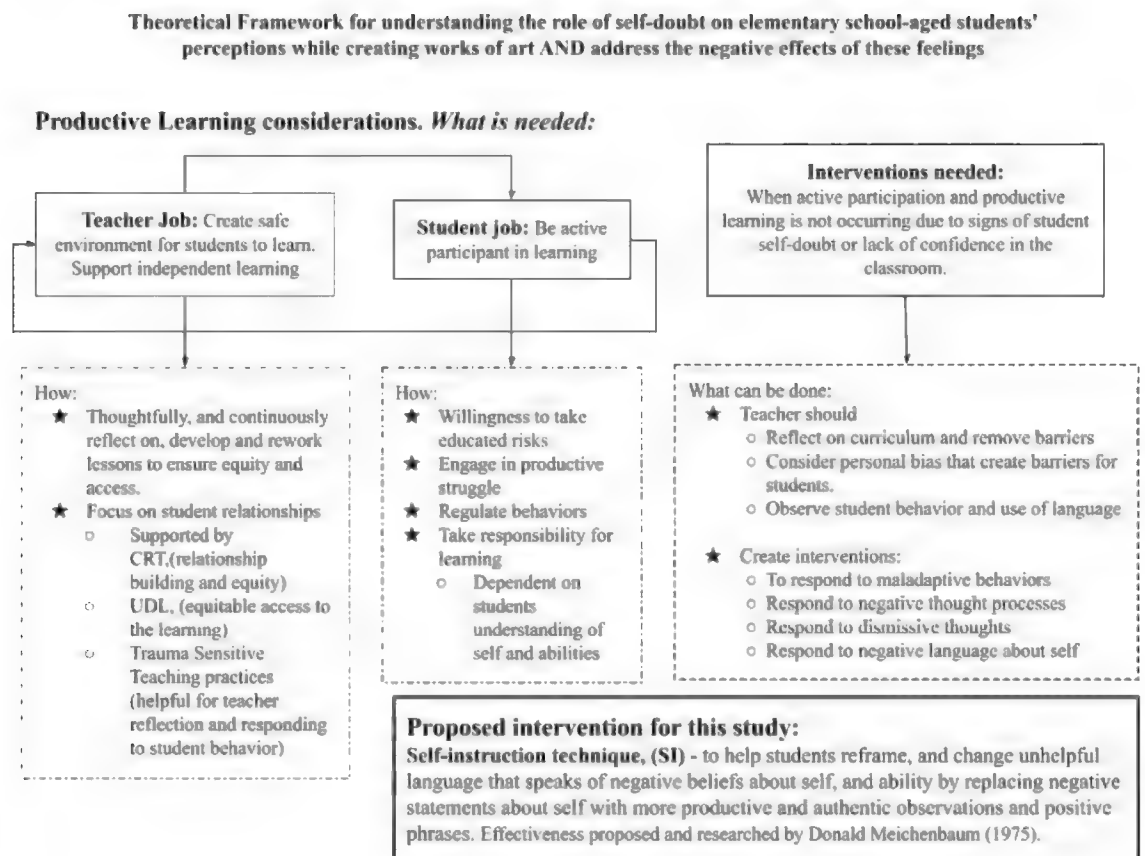


Figure 1. Theoretical Framework.

To understand how to support students who may be experiencing self-doubt and low self-esteem in the classroom, teachers should first explore and reflect on their

teaching to identify what aspect of their values becomes apparent in their curriculum.

After considering the curriculum and strategies used in the classroom to support students' feelings of safety, belonging, and individual growth, teachers should reflect on their personal experiences and the observed experiences of their students. My observations led me to conclude that my curriculum, though allowing choice and personal reflection, remained challenging for some students. Observations noted that some students continue to feel low self-esteem and reported feelings and beliefs about their abilities that limit their full participation in the classroom. This acknowledgment promoted the goal of more individualized interventions for students, focusing on helping them realize the negative thoughts and feelings they are projecting about their abilities: and creating new, more helpful statements meant to help students gain more confidence and independence despite fear and doubt in the future.

### **Significance of the Study**

The findings of this research aimed to reduce self-doubt and low self-esteem in elementary-aged students. This work could directly benefit the participants in the study, whose perspectives on their abilities or the ideas of what art should look like would need to have gone through some sort of change during the process of the study for it to be successful. This study could help students feel less doubt and create more confident learners who are willing to try new things with less worry or self-sabotaging behaviors stemming from poor self-concept. In addition, this information will be beneficial to teachers as they reflect on their thoughts and use of language around art and ability and work to promote positive self-esteem through their interactions with individual students. Removing some of the previous barriers to learning caused by student self-doubt could

help students become more engaged in the classroom and foster understanding and more profound thought focusing on individual goals and uninhibited creative thinking. This study can also help identify art activities and common sets of language or scripts and sentence structures that can be modified and repeated as a tool for students to manage their feelings during moments of frustration during the creative process.

### **Limitations of the Study**

This study took place in the elementary school in which I taught Kindergarten through fifth-grade art during the 2021-2022 school year. Students in this study were chosen based on my observations of them in my classroom over time. The study was open to students from first through fifth grade who fit certain criteria. Despite the age range, all students considered for the study were bound by the consistent display and shared feelings of self-doubt or lack of self-confidence in their abilities in the art classroom. The majority of eligible students in this study had experiences with me as their art teacher during the past three years and some had known me in another fashion before I became their art teacher. However, all students, regardless of where they had been learning in previous years, had all experienced and continued to experience school norms differently during the 2021-2022 school year due to the effects of COVID-19 and how it has impacted their educational experience over the past two and a half years. These experiences created differences in how I was able to interact with students during the past year and a half. Though I had been able to build strong relationships with many of my students over time, I know that the relationships and trust some students might have felt toward me may have changed in reference to the pandemic and the changing learning environment and access COVID-19 may have caused for individual students.

There were also eligible students who were new to the district and had not had in-person classes with me before this year, which would give me a shorter amount of time to develop a strong relationship of trust that would be helpful within this study.

These relationships were essential to the research I undertook, as I asked students to remain honest and be willing to truthfully share their experiences with self-doubt, confidence, and feelings of failure. These topics are very personal and can be scary to admit to others, particularly those who are thought of as authority figures, which I would qualify as, being their teacher. For this reason, I knew I needed to carefully examine whether students were exhibiting people-pleasing behaviors in response to my questions rather than genuine feedback to appease me. This relationship-building needed to continue to be worked on for students to feel comfortable sharing their fears without worrying about my reaction.

Working with younger students also created specific challenges. Many students were at the beginning of their learning career and just beginning to learn to read and write; therefore, not all eligible participants would be able to communicate with written reflections as easily as others. These moments needed to be considered and accounted for, and several ways for students to respond to questions and reflections were utilized. It was also acknowledged that due to the age of students, reflections may not be complete or thorough, as not all students will have the language needed to elaborate or further explain their feelings, thoughts, and ideas compared to older students. These challenges would only be more complicated when working with students whose primary languages were not English. My school had a large English as a Second Language (ESOL) population and a large number of bilingual students. I did not end up getting permission from

guardians of any ESOL students to partake in this study, though I did have two bilingual students. I did not wish to exclude English Language Learners from my study if they fit the parameters of a potential participant, as the study may still be beneficial to them. I was prepared to work with ESOL students, aware that I would need to be even more conscious of my use of language with these students than my study itself would already apply. I knew I may need to consider working on translating and other modes of communicating if an ESOL student needed the extra support. I realized I may have even needed to consider additional students I might not have intended to include in the study who were bilingual and can speak more freely with English language learners in the classroom for them to feel more connected and valued in the study, which would have changed the design of the study for those potential participants. Still again, there is always a chance that the translation's meaning can be lost and misunderstood in the end so careful consideration would need to be made in all parts of the study.

Beyond the students themselves, there were time constraints on the study due to the Thesis requirements for Moore College of Art and Design. The amount of time to gather data consists of three to four months, seeing as my students only met with me once in a six-day cycle was not a sufficient time for me to gather enough data during my study if I only utilized scheduled class time. To have enough data for the analysis, I needed to create a separate time for students to engage in art-making and learn the proposed interventions. The special sessions allowed me more time to gather data and work with students; we also automatically created a different classroom environment for students in this process that was more personalized and intimate. The individual or small group setting allowed me to work with students more directly than I could in the classroom this





**Culturally Responsive Teaching (CRT)** - CRT is a framework for educators to help marginalized students build up the cognitive skills needed to do rigorous work. CRT recognizes educational inequity has stunted cognitive growth for some learners, particularly for students who are culturally and linguistically diverse. CRT aims to support students' growth from dependence to independence by helping students activate and build cognitive skills and information processing skills (Hammond, 2015).

**Ineffective problem-solving** - The brain's attempt to solve problems without strong problem-solving abilities results in behaviors that do not support effective learning or sustainable solutions to a problem (D'Zurilla & Goldfried 1971).

**Maladjusted or Maladaptive behavior** - A type of behavior pattern that is developed in order to help solve a problem, but has shown evidence of being unhelpful or even harmful. Maladjusted behaviors can affect performance and influence a person's self-concept in negative ways. These behaviors were created by the brain in an attempt to help an individual but over time have the opposite effect on a person (D'Zurilla & Goldfried, 1971, Neck & Manz, 1992 Farber, 1963).

**Scripted self-statements** - These terms refer to intentionally created scripts, or dialogs, created by an individual to attempt to replace unhelpful or negative self-talk an individual may be applying to themselves. Scripted self-statements are created by the individual as an intervention or coping mechanism in which to try and help change the language they use to describe themselves and their abilities. In theory, improving self-statements by changing the script will help to change one's beliefs about themselves over time (Meichenbaum & Goodman, 1971).

**Self-concept** - Self-concept refers to the beliefs and internal understandings a person has about themselves and their capabilities (Neck & Manz, 1992).

**Self-esteem** - Self-esteem refers to views of self someone may hold. These views can be positive or negative, helping people exhibit behaviors associated with confidence or with defeatist terminology. Those who experience low self-esteem tend to be more complacent about perceived failure and may participate in negative self-talk behaviors. Campbell(1990) describes those experiencing low self-esteem as being “people [who] have more poorly articulated notions of who or what they are” (Campbell, p. 539).

**Self-Instructional Technique** - The self-instructional technique was proposed by researcher and psychologist Donald Meichenbaum. Meichenbaum theorized that by changing the way people speak about themselves and replacing these phrases and words with more positive and helpful information, one could positively influence performance and self-concept (Meichenbaum, 1975).

**Self-talk or Self-Statements** - Self-talk and self-statements refer to ways in which we refer to ourselves both internally and externally. Self-talk is influenced by our self-concept and beliefs and can be thought of as our internal dialog. This internalized talk influences our schema, or world view, and helps us to understand and make sense of the world. Self-talk is sometimes referred to as internal dialog, again referring to the language and running commentary inside one’s mind (Ellis, 1962; Meichenbaum 1975). This internal self-talk is also used in order to help us monitor our behaviors (D’Zurilla & Goldfried 1971; Manz & Neck, 1992) and proceed through problem-solving and personal directives in a covert manner.

**Self-doubt** - In reference to this study, the term ‘self-doubt’ is being used to describe any situation in which someone justifies a negative view of themselves, their work, or something else, by using negative language or behaviors prompted by one’s self-concept or internal beliefs of self and world view (Campbell, 1990; Neck & Manz, 1992). Self-doubt, in this definition, is a *reactive feeling* rather than a state of being.

**Situational Problems** - Small scale, everyday problems. Situational problems require low-stress solutions (i.e., decisions about what to eat or wear) that allow you to function effectively throughout your day. (D’Zurilla & Goldfried 1971).

**Trauma-Sensitive Teaching Practice and Learning Environment** - Souers and Hall (2016), define a trauma-sensitive learning environment, as a “classroom, school, nook, or any other teaching location in which each and every student is healthy, safe, engaged, supported and challenged” (p. 3). Trauma-sensitive classrooms consist of educators who acknowledge the possibility that their students have experienced, or are currently experiencing trauma, and acknowledge their own interactions with trauma in their life. Creating reflective teaching practices in which to develop a safe environment for students, reframe and address negative behaviors and cycles in the classroom and create expectations of high levels of learning for all (Souers & Hall, 2016).

**Universal design for learning (UDL)**- A framework for teaching in which teachers work to create curricular changes which will allow the greatest access to learning opportunities for all learners while retaining high expectations and rigor for students. UDL works to remove barriers to students' learning by focusing on relationships and individual student development through a more open-ended and choice-based curriculum design (Byron, 2018).

**Assumptions to be debated**

- Given that art practices can be used as a way to explore and understand our feelings, the usefulness of quick, meditative, or mindfulness art activities to support students' emotional wellbeing will be debated.
- Given that self-doubt stems from personal experiences and interactions with the world, whether or not the origins of an individual's self-doubt need to be directly addressed and solved in order to help students improve their self-concept will be debated.
- Given that personal beliefs influence behavior, whether or not our beliefs about ourselves and others influence our performance abilities will be debated.
- Given that Meichenbaum and Cameron's (1974) findings suggest scripted self-talk or statements can influence positive changes in self-concept and performance among college-aged students and other specific clinical populations, whether this practice could also be helpful for young children's self-concept will be debated.
- Given that language is an important component of our ability to communicate, and can affect our emotional states (Neck, C.P. & Manz, C. 1992.), the use of language regarding ourselves and its possible influence on our ability to perform will be debated.

**Assumptions not to be debated**

- Given that artmaking of various forms and styles has been seen in cultures throughout the world and throughout the span of human history, the fact that all humans have the capability to create unique works of art will not be debated.
- Given that elementary-aged students can benefit developmentally and emotionally from creating works of art about themselves and their experiences, the need for artmaking experiences in the elementary art classroom will not be debated.
- Given that it would be unethical for me to administer any form of psychological testing on students, whether or not I can provide data using psychological evaluations and clinical testing procedures will not be debated. Assessments and evidence of change will instead be made via observation and various forms of student reflections and self-reports collected during the study.
- Given that the sample of student participants in this study was limited to students within a suburban elementary school in which I teach and that these selected participants were also limited by parental consent, whether or not the results of this study accurately represent other elementary settings will not be debated. It would be unreasonable to suggest that a set group of students from the same suburban area elementary school could represent the larger scope of elementary-aged students in the United States.

- Given that self-doubt and low self-esteem can be experienced at any age and may have resulted from various experiences in and out of academic settings, the existence of these experiences being relevant in young students will not be debated.
- Given that art education and psychology, even art therapy, are different fields of study and require different expertise, and I, as an art educator, do not have the qualifications to remedy the causes of students' self-doubt or low self-esteem, whether or not I should directly address or unpack students origins of self-doubt will not be debated.

### **Summary / Roadmap of Chapters**

Students' experiences of self-doubt impacts their ability to learn and participate in the art classroom fully. In order for students who have been exposed to these feelings of self-doubt to regain their confidence and feel capable again, teachers need to find simple ways to help students independently help themselves. In this study, I used the theories of Donald Meichbaum to help students combat negative self-talk and internalized scripts in order to move beyond these limiting views. Meichbaum suggests that changing the way we speak to ourselves through the creation of specific, positive scripts can help participants modify their views of themselves, and correlations have been made showing that performance, or ability to create, marked improvements in individuals' performance as well. Though Meichbaum was working with older participants and specific clinical populations in many of these studies, I believed his work showed the potential to help younger students overcome these negative feelings by changing the way they use language in the art room (Meichbaum, 1975, Meichbaum & Cameron 1974). This method

allowed me to address self-doubt in the classroom without delving into students' personal experiences that they may not want to share with me.

The next chapter of this thesis will introduce some of the important literature that has inspired this study and motivated me to look for ways to ethically assist students' growth in conjunction with some very personal beliefs and feelings about their abilities. We will first look at some teaching frameworks that illustrate the necessity of addressing students' emotional well-being and sense of safety in the classroom to assist in activating learning experiences. Looking next at correlations between problem-solving skills and beliefs about oneself, time will be spent exploring how these skills and beliefs may affect our behavior and lead to different thought patterns. Finally, consideration will be given to how language may influence self-concept and general beliefs in one's ability. Attention will be given to how our self-concept affects our emotional states and performance. Possible ways to work with or modify our language use to create a positive internal change of views of self will be carefully considered.



## CHAPTER II: REVIEW OF THE LITERATURE

### Introduction

Success in the classroom is measured in various ways, through tests, observations, artifacts, reading assignments, or even performances and other non-traditional avenues. In academic settings in the US, this often leads to a number or a letter grade to indicate some level of success for students. These ideas are presented to students by teachers, and other educators whom we would like to believe are objective and fair and strive to do their best to help others succeed. However, historically, we know that not all students will show the same level of success. But why should that be? If similarly competent teachers teach all students the same techniques and ideas, student success rates should be the same between students of similar intellectual capacities, right? In a perfect world, learning such as this could be carefully packaged and returned to students in this neat idea, and in theory, good teaching should remain good despite the audience. It sounds good, but I am sure my reader would say that this experience has never seemed to ring entirely true. Learning and teaching human beings in all their beautiful intricacies is never that simple.

Students' academic success in any subject has many factors, including intellectual differences, access to quality education, ethnic, cultural, and linguistic differences, differences in gender or gender expression, as well as many other factors, all creating variants in how students perform. When we consider students' previous experiences and beliefs, we are confronted with even more factors influencing academic performance. Before authentically looking into helping students overcome gaps in achievement in any subject, we must create a safe environment and then work to help individuals practice and maintain the skills needed to grow independence. In this section, we will examine some

ways that research suggests we will be able to help students work through past experiences of self-doubt and skewed internal views of self-concept.

### Literature Review Concept Map

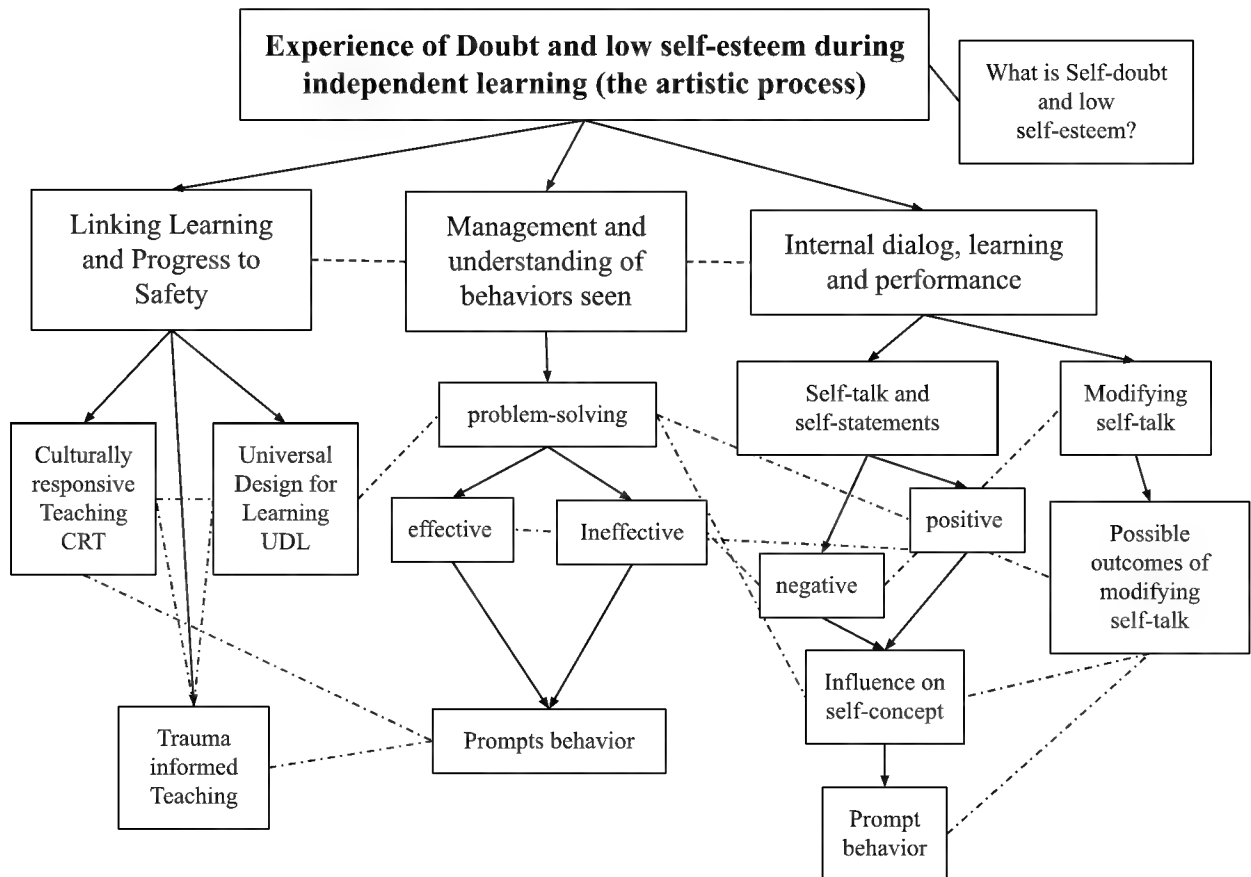


Figure 3. Concept Map of Literature Review Topics.

### Self-doubt and Low Self-esteem

Before we start to consider the environment and the things that we might be able to do according to research to support students in their successful ability to learn in the art room or any space, we should first examine what self-doubt and self-esteem mean within the context of this study. In reference to this study, the term ‘self-doubt’ is being used to describe any situation in which someone justifies a negative view of themselves, their work, or something else, by using negative language or behaviors prompted by

self-concept, or internal beliefs of self and world view (Campbell, 1990, Neck & Manz, 1992). Self-doubt, in this definition, is a reactive feeling rather than a state of being. Self-doubt in this study is understood as a feeling that arises from other stimuli and though it may feel all-encompassing, is not a permanent state of being, the experience of self-doubt is subject to change over time.

Self-esteem refers to views of self someone may hold. These views can be positive or negative, helping people exhibit behaviors associated with confidence or with defeatist terminology. Those who experience low self-esteem tend to be more complacent about perceived failure and may participate in negative self-talk behaviors. Campbell (1990) describes those experiencing low self-esteem as being “people [who] have more poorly articulated notions of who or what they are” (p. 539). These instances where students lack an awareness of themselves or what they are doing, or saying to themselves, further promote frustration and negative self-talk (Campland, 19).

### **The Necessity of a Safe Environment**

Safety is a basic need for all. Without a feeling of safety, it becomes harder neurobiologically, for individuals to interact with the world thoughtfully and engage in learning (Minahan, J., 2019). Therefore, creating emotional safety in the school environment is crucial for students to feel successful, and needed to be one of my first considerations when designing and attempting to implement any strategy or activity for engaging with students. One way to promote this feeling of safety is by building positive relationships with students and continued thoughtfulness pertaining to students’ emotional needs. Not all educators however share this view, this researcher has personally met several teachers and individuals who believe it is unnecessary to address

the emotional needs or get to know their students beyond the necessary components needed to teach content. These educators have argued that taking care of emotional needs is the exclusive job of guardians and other specialists such as counselors and psychologists. They may insist that a teacher's job is just to teach content. Though I agree that it is true that the job of a teacher is to teach content to students, there is much evidence to the fact that learning becomes more accessible and deeper connections can be made when students learn in a safe environment that affirms their sense of self and in which they feel valued (Minahan, J., 2019). Some of this evidence will be highlighted in the subsections to follow, through the discussion of Culturally Responsive Teaching (CRT) practices, the use of Universal Design for Learning (UDL) ideals, and Trauma-Sensitive teaching practices, as well as a brief discussion on how the brain reacts under stress to illustrate the connection of brain science to learning ability.

***Culturally Responsive Teaching (CRT) and Positive Classroom Environment.***

Culturally responsive teaching (CRT) is a framework for helping to close educational gaps and inequity in the classroom through reflection and understanding of brain science and its connections to the ability to learn in the classroom (Hammond, 2015, p. 15-18). Using aspects of CRT emphasizing the building of relationships and understanding of one's identity, teachers can better prepare themselves to be culturally responsive and build positive relationships with students. One of the most critical factors of CRT is building relationships with students, particularly students who are referred to as 'dependent learners' (Hammond, 2015p. 13). Dependent learners are students who have not developed all the skills they need to direct their own learning independently. Independent learners are able to use the cognitive skills they have developed from early

childhood to engage in academic rigor and exhibit the ability to engage in ‘productive struggle’ (Hammond, 2015, p. 133) that helps to grow brain-power as they move through their learning experiences. Dependent learners, however, have experienced some sort of barrier, often resulting from educational inequity they have experienced or continue to experience in educational facilities (Hammond, 2015, p. 13-21).

These inequities created by educators, curriculum, or other interactions could be intentional or unintentional but have held dependent learners back from gaining independence. In her book on the subject of CRT, Zaretta Hammond (2015), notes that dependent learners are often those who are marginalized in school settings, linguistically, culturally, and through differences such as gender and expression. Culturally responsive teaching theory suggests that these students are often marginalized and become dependent learners because of a lack of understanding of the importance of culture. The lack of understanding educators and curriculum may have affected someone's culture as well as the lack of awareness of how their own culture influences how they interact with others has affected the way we understand and created barriers for learners who differ in cultural experiences of their teachers or peers. This lack of understanding of each other creates gaps for students. Without meaningful connections to the curriculum, learning is difficult to internalize as all learning is filtered through our personal background knowledge to help make sense of concepts. Differences in culture can also lead to misunderstandings of cultural norms and customs that create confusion and an unwarranted or intentional offense that can adversely affect learning. Through teachers’ reflection on their own culture and the deep cultures of their students, we can begin to restore relationships and build positive and culturally affirming environments that will

lead to student success (Hammond, 2015 p. 18-34). It is important to note that this is not an easy process and would take a lot of time and continuous reflection for a teacher to create a stable positive environment for students. It is important to address these ideas, as this understanding of the need for safety and its connection to cultural backgrounds to learn has a physical basis in brain science which we will be exploring in the next section.

***How the Brain Influences the Ability to Learn.***

Zaretta Hammond (2015) connects the understanding of CRT principles primarily to brain science and the evolutionary works of the human brain. Considering the many parts and systems in the brain, it is easy to understand that our brain function is vital to our ability to learn regardless of intellectual capacity. The human brain is a complex system designed to keep us alive and prospering, however, some important functions of our brain can be counterproductive to learning when triggered unnecessarily. Activating the parts of the brain that trigger stress responses can change how the brain functions at any moment. There is a great deal of evidence to the fact that before substantial learning can be done, students must feel safe to engage in learning in the environment they are in (Farber, 1963, Hammond, 2015, Minahan, 2019, Souers, 2016). Hammond (2015) illustrates this notion well, describing how this is due to the complex nature of our brain and the way that we interpret the world through our individual schemas or worldview created by our brain (Hammond, p. 23).

When we experience our surroundings information is taken from our senses and transmitted to our brain where it is interpreted, stored, or discarded. The reptilian region of our brain is the oldest part of the human brain. It is sometimes referred to as the lizard brain; this part of the brain system's main job is to be constantly on alert in order to keep

us alive. The reptilian region connects further to the limbic system, another larger layer of the brain that deals with emotional regulation and response. After its initial journey through the parts of the brain, the information we receive from our senses is given the time to be slowly processed in the prefrontal cortex, which is responsible for much of our higher-order thinking and learning. Learning can only reach this part of our brain after making its way through these other sections of our brain, which are much more emotion-driven (Hammond, p. 37-42).

Students who do not feel safe or included in the classroom may have difficulty filtering information through their brains as this lack of belonging or ability will influence the emotional state of their brain. When the brain feels threatened, the reticular activating system or RAS, responsible for alertness and attention, reacts very quickly to the circumstances that made it feel threatened, triggering a response from the amygdala. The amygdala is a small structure that is part of the brain's limbic system that, when activated, releases stress hormones that cause individuals to experience fight, flight, freeze, or appease responses. These responses are valuable and necessary during dangerous situations but can be detrimental in the classroom when no physical danger is apparent. Historically, the amygdala has helped keep the human species alive by quickly reacting to dangerous stimuli requiring higher alertness and quick action. However, problems occur when these responses are exhibited in response to emotional triggers that do not need the same level of responsiveness. During one of these 'amygdala hijacks' (Hammond, 2015 p. 40), individuals become more hyper-aware, but the change in brain chemistry does not allow for higher-order thinking, taking away one's ability to retain and solidify information in their brain. (Hammond, 2015, p. 35-46).

Students who are dependent learners may show delays in their ability to use cognitive skills and strategies because of unconscious threats to their personal identity or misunderstandings of culture that have activated these stress responses in the brain. Understanding how emotional stimuli works, it would make sense that students who do not feel seen or understood in their learning environment would have a hard time learning in this same environment. Threats to one's self-concept and schema would make it impossible for real learning to take place. Learning may be delayed or impossible altogether if your brain is under constant attack and stress (Hammond 2015). The way the human brain is wired clearly shows why creating a reflective classroom environment that promotes safety and respect, and developing a good rapport with students is essential in our ability to teach. To learn, one must first feel safe enough to process the information presented before they can begin to participate in the learning environment.

Before I can start crafting interventions for students whom I have interpreted as showing signs of self-doubt in my classroom environment, I must begin by reflecting on my own teaching regarding my students' cultural backgrounds. I must consider my own bias and experiences that may lead to misinterpretations of behavior. I must also consider my personal interactions with students to determine if I am reacting or responding to students in such a way that I may be creating a situation that lacks safety for individual students. Teacher reflection is vital in creating a safe and productive environment for learning; if the teacher-researcher is the cause of unease for students, the study will be unlikely to show any productive change or benefit and learners may remain dependent throughout the study.



***Considerations of Universal Design for Learning.***

Universal Design for Learning, or UDL, does not explicitly work to create a safe environment per se but its framework also requires a solid, caring relationship to help students succeed. Liz Byron (2018) explains that “UDL is a framework for teaching in which the curriculum and environment are designed to reduce barriers by providing multiple options or means for engagement” (p. 3). UDL principles put students’ experiences first and work to find and reduce barriers that may keep individuals from experiencing success. With UDL principles in the art room, goals are presented that are open enough to be applied to any individual’s unique needs and wants. Hence, all students have the choice and ability to be successful and show learning in individualized ways. This openness allows for multiple views and preferences to be available, which promotes the creation of a safe space for learning where discovery can flourish through various means.

Byron (2018) supports her claim that UDL helps to generate engagement by noticing that students in late elementary and middle school who are often required to take art courses do not always self-identify as an artist or a person able to make art, based on their perception of their abilities (Byron, 2018, p.18). Barriers have been put in place for these ‘non-believing’ students, prompting the formation of personal beliefs about their ability to create art. Barriers can slowly be taken away; however, perceptions can be changed by allowing multiple means of creation to be utilized to meet students’ needs, creating an environment where numerous forms of success are celebrated and validated (Byron, p. 20). There is “no place for cookie-cutter art lessons when instruction incorporates multiple means for creation and expression” (Byron, p. 69).

This ideology of creation and teaching of artworks together is further supported by CRT and brain science ideas, which emphasize that one-fits-all plans do not work for all students and often leave learners behind in the process (Hammond, 2015). The UDL framework can allow for more student control and help create connections to the world and personal background, promoting safety in the classroom setting (Byron, 2018; Hammond, 2015). UDL principles create a space for all students to be successful. Similar to the implementation of a culturally responsive classroom, utilizing universal design in the classroom, even in its simplest form, requires continued teacher reflection and adjustments to ideas and modes of teaching. It is important for me as the teacher-researcher to continuously keep in mind that I may create additional barriers to students' learning due to the design of lesson goals or lack of flexibility and personal connection. If the design of my lessons creates barriers to learning and an atmosphere of frustration students will continue to struggle with self-doubt due to the content despite any coping strategies learned. UDL-designed project goals promote a more equitable environment for learning and can contribute to a safe working environment.

***Trauma-Sensitive Teaching and the Need for Safety.***

Souers and Hall (2016), define a trauma-sensitive learning environment, as a “classroom, school, nook, or any other teaching location in which each and every student is healthy, safe, engaged, supported, and challenged” (p. 3). Trauma-sensitive classrooms consist of educators who acknowledge the possibility their students have experienced, or are currently experiencing trauma. Teachers in these classrooms also work to acknowledge their own interactions with trauma in their life. This awareness is used to create reflective teaching practices in which to develop a safe environment for students,

to reframe and address negative behaviors and cycles in the classroom and create expectations of high levels of learning for all (Souers & Hall, 2016). Trauma can be defined as an overwhelming experience, or experiences that challenge or discount an individual's belief that the world is a good and safe place (Brunzell and Walters, 2016). Considering what we know about brain functioning and its reactions to perceived threats, trauma can have a long-term effect on a person's ability to effectively learn, or be open to trying new things.

Jessica Minahan (2019), in an article about Trauma-Informed Teaching Strategies, noted “ Up to two-thirds of U.S. children have experienced at least one type of serious childhood trauma, such as abuse, neglect, natural disaster, or experiencing or witnessing violence” (Minahan 2019). This estimation is alarming, considering this article was written right before the major global health crisis, COVID-19, became a concern and resulted in some drastic changes for many students' and families' learning and interactions with others. This reality forced change, and uncertainty has certainly impacted people throughout the world in ways we may not be able to fully comprehend for years to come.

There are many strategies that can be utilized in the classroom to help students who have experienced trauma, these strategies help promote positive and authentic thinking practices, stability, and predictability and create strong relationships that all students can benefit from regardless of background. Jessica Minahan (2019) created an extensive and thoughtful list of strategies and considerations for implying trauma-informed teaching practices focusing a great deal on teacher reflection and consideration of students' behaviors paired with teacher response. She suggests teachers

always begin by remembering that trauma can lead to unexpected responses in student behavior, student reactions may be a surprise at times as human reactions to trauma, and an individual's attempt to stay calm can build up and come out in unexpected ways, which is why implementing trauma-informed teaching strategies is important. These strategies can help students feel less triggered, and help keep heightened emotions from taking over (Minahan, 2019).

**Thoughtful interactions and relationship building.** The effects of trauma on a person's behavior can cause a distracting learning environment. Considering the role of a teacher as an authority figure, who has control, and the authority to judge a student's ability and circumstance, teachers' positive interactions with students are vital to helping a student who has experienced trauma to succeed and avoid power struggles in the classroom. Minahan (2019) noted, "... for traumatized students, the ability to learn and behave appropriately can be person-dependent. When they are with a safe and supportive adult, their behavior reflects that. ... The teacher is 50 percent of every interaction with a student: By changing the way we give direction or respond, we can reduce problematic behavior. " (Minahan 2019). Taking the time to learn about your students as individuals, even just for a few moments a day, reflecting on how students respond to directions, and thoughtfully giving students time and a sense of control over their situation can positively impact students' ability to continue to learn. Maintaining clear and predictable circumstances and check-ins can help to create a predictable environment, and give meaning and context to teachers' directions that go beyond the teacher's demanding control, which all allow for students to begin to regulate their own behaviors (Minahan, 2019).

**Helping to change thought patterns.** Students who have experienced trauma can at times get stuck in unhelpful patterns of thinking focusing on the negative, these thoughts can cycle through their minds and continue to repeatedly validate themselves as students think through their experiences. In order for students stuck in this cycle to successfully move on they need to find a way to “change the channel”(Minahan, 2019). Changing the channel refers to any number of strategies one could implement to help distract and move students away from the repetitive and unhelpful thoughts disrupting their clear thought process by engaging in other cognitive tasks such as searching for an object, reading something, or engaging in another enjoyable activity to refocus the mind on something else to calm these negative spirals. The teacher should also be mindful of how their feedback can set students into a negative spiral as well. Part of being a teacher is to help students when they have done something incorrectly, however, students who are prone to these negative thinking cycles can be similarly triggered into one by teachers as they attempt to give productive feedback or encourage students to reevaluate their learning interpreting a phrase such as, “ Don't forget to use a variety of marks.” as “ You are not doing a good job.” The teacher may not have said anything about not liking something or have even implied that anything was wrong at all, but the interpreted meaning of a reminder or suggestion could be skewed in this way and help to start a negative loop. A way to try and help avoid this spiral from the beginning is to be very explicit about your reactions, directly letting students hear positive feedback and praise efforts while grounding redirection of behaviors or suggestions for improvement by pointing out positives, and being aware of your own language when speaking of strengths and weaknesses in a work.

Minahan recommends, “When giving negative feedback, teachers can use the positive sandwich approach—starting and ending with a positive comment.” (Minahan, 2019) Doing so will help to initially distract students' thought processes from beginning the descent into “all or nothing thinking” patterns (Bloom & Border, 1950, cited by D’Zurilla & Goldfried, 1971). Framing negative feedback around success or positive feedback and strengths also helps students' self-concept, giving them reassurance that they are competent and can be successful (Minahan, 2019). “Recognizing areas of strength in students is a powerful way to combat the poor self-concept and negative thinking associated with trauma.” (Jennings, 2018, cited by Minahan, 2019). Utilizing these strategies can help all students in the classroom maintain a feeling of value and build confident learners no matter their personal situation as all these strategies focus on the individual and understanding the actions and reactions of others. With a better understanding of ourselves and others, we can create strong relationships and a positive learning environment.

**Summary.** As Hammond (2015) consistently reminds us in her book about culturally responsive teaching and the brain, teacher reflection is consistently needed and always vital in the creation of equitable education and the creation of lesson planning (Hammond, 2015). Culturally responsive teaching, Universal Design for Learning, and trauma-sensitive teaching strategies show that barriers arise for students when their background, personal connections, and relationships with teachers are not considered. In order to help students grow and gain independence, it is evident to me that continuous reflection on our understanding of our own culture and our students, as well as

consideration of past, or current trauma in our lives and the lives of students, is needed to limit barriers that get in the way of learning.

### **Barriers to Learning Due to Behavior**

After creating a safe space, students are on their way to figuring out how to learn effectively. Still, not all students exhibit, or as noted earlier, know how to use the cognitive skills they need for rigorous learning, which may lead to student differences in displaying behaviors. In addition, behaviors may be influenced by one's ability or lack of ability to work through and solve everyday problems creating barriers for individuals to learn effectively. Farber (1963) links human learning and behavior by showing how private thoughts and experiences have a high expectation of creating behavioral outcomes. According to the theories by psychologists such as Skinner (1953), Allpent (1961), and Dulaney (1962), to name a few, thought patterns influence and inform behaviors. *Figure 4* was created to illustrate a conception of this series of consequences.

## Problem-solving Behaviors

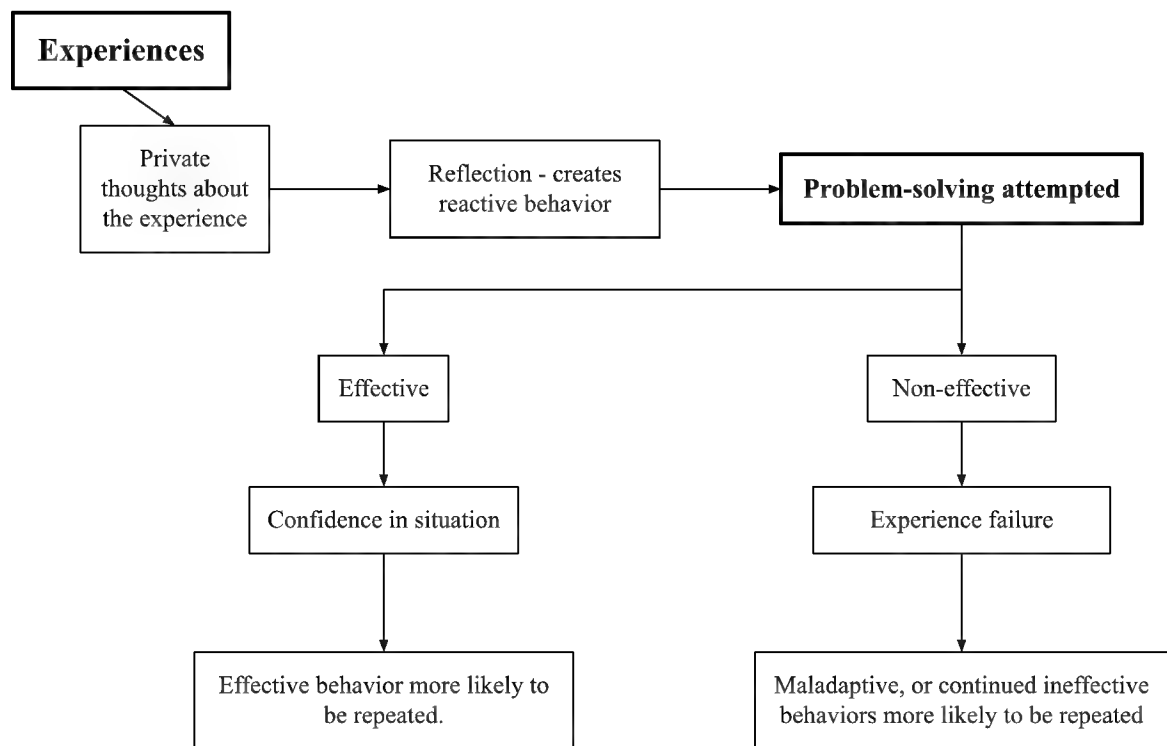


Figure 4. Problem-solving and Behavior.

Thomas D’Zurilla and Marvin Goldfried (1971) have investigated behavior patterns and thoughts about behavioral modification and how they could be made to support learning and more positive outlooks. These psychologists have spent a great deal of time reviewing and evaluating behaviors caused by “situational problems” (D’Zurilla & Goldfried 1971, p. 107), daily everyday problems that impact our behaviors throughout the day. They recognize that people are continuously faced with problems to solve, both simple and complex and that these problems need to be addressed to maintain what they refer to as an “adequate level of effective functioning” (D’Zurilla & Goldfried 1971, p. 107); in other words, a sense of well-being and general ease. These situational problems



can be simple, such as what pair of shoes to wear, or more complicated, such as coming up with mental directions to figure out how to navigate somewhere. Given that these instances are important for everyday functioning, they have considered how the inability to work through some of these problem-solving situations can lead to ‘ineffective’ behaviors. D’Zurilla and Goldfried (1971) explain:

Much of what we view clinically as “abnormal behavior” or “emotional disturbance” may be viewed as an effective behavior and its consequences, in which the individual is unable to resolve certain situational problems in his life and his inadequate attempts to do so are having undesirable effects, such as anxiety, depression, and the creation of additional problems. (p. 107)

Taking into consideration that everyday problems can be solved in multiple ways, problem-solving in general and our responses to it connect to our learning process. As discussed earlier, learning ability is influenced by our environment and feelings of safety; these feelings that influence our learning behaviors can connect to our everyday problem-solving skills. Connections can be made between the ideas of D’Zurilla and Goldfried (1971) and Zarreta Hammond’s (2015) report on brain neuroscience, which suggests that these moments of ineffective behavior, and nonproductive problem solving, can be further influenced by one's feelings of self and abilities as well as feedback from the environment. For example, environments creating barriers or a lack of safety or has historically felt problematic could influence the amygdala into triggering an amygdala hijack response that will keep students from effective problem-solving (Hammond, p. 39-40). The stress hormones activated along with the amygdala trigger a fight, flight, freeze, and appease response in the brain, limiting the ability for more challenging

higher-order thinking. Practical problem solving also needs to make use of higher-order thinking to solve ‘situational problems’ mentioned before. This response may lead individuals to continue using ineffective skills and maladaptive behavior patterns to work through problems they encounter while in this heightened state (D’Zurilla & Goldfried, 1971).

Bandura (1969), Peterson (1968), Ullmann and Krasner (1969) have similarly theorized that what may be considered mental illness may be better understood as an individual's response process and how those responses influence behaviors and expression.

Rejecting the traditional “ medical” view that abnormality is best explained in terms of symptoms of some underlying “ disease” process, the social-learning approach places most of its emphasis on the individual’s learned response to more or less naturally occurring life circumstances. When the individual’s characteristic response is ineffective (i.e., results in negative consequences to himself and/or others), it runs the risk of receiving such labels as “ abnormal,” “disturbed,” or “ maladjusted,” depending upon the particular behavioral norms and standards of the person doing the judging. (Bandura, 1969, Peterson, 1968, Ullmann & Krasner, 1969). In attempting to account for ineffective behavior, social-learning theorists stress the inadequacy of the person's past learning history; the individual is prone to behave ineffectively in certain situations because he has never had the opportunity to learn a more effective way of responding to those particular situations. To overcome this performance deficit, the individual must engage in successful trial-and-error behavior (i.e., instrumental learning), receive

“guidance” from others (i.e., prompting, social reinforcement), or patterns his behavior after the example of other effective individuals. p.109

(Bandura, 1969, Peterson, 1968, Ullmann & Krasner, 1969, as cited in D’Zurilla & Goldfried, 1971).

These learned responses, if ineffective, can create behavioral norms that are unhelpful due to one's history and learned behaviors. Not having had the opportunity to learn more effective methods, a person can be stuck in patterns of behavior that limit them. Learners must develop new practices to help replace these behaviors, some of which may require extensive guidance and intervention.

In the context of this study, I am finding myself working exclusively with students that may need to learn new ways to ‘figure out’ how to create or understand success in the art classroom; only then will students be able to move away from the stressful situations and behavior patterns that they currently find themselves in.

Problem-solving skills may need to be strengthened to help individuals feel a sense of self-confidence and the ability to solve everyday problems. Problem-solving skills can be addressed through interventions focusing on scaffolding skills and awareness to help create independence (D’Zurilla & Goldfried, 1971, p. 110). In order for one to effectively respond to problems, students need to accept that problems and challenges are everyday experiences and that these experiences can be coped with and solved with efficiency the majority of the time.

Albert Ellis (1962) notes, that the tendency to ‘overthink’ or create irrational expectations of the world and what “should be” can lead to feelings of “disappointment, frustration, emotional upset, a maladaptive behavior” (Ellis, A. 1962, as cited by

D’Zurilla & Goldfried 1971, p. 112). These results show a failure to accept or understand that problems are a normal part of our life experience, limiting students’ ability to continue working through situational struggles, and making it harder to feel successful.

### **Awareness of Self and Behavior.**

Being aware or exhibiting awareness is discussed in a review of literature titled, *The Things People Say to Themselves* by I. E. Farber (1963), which works through different ideas about behavior and individual goals. Awareness was described as the ability to understand, verbalize and use stimuli from the environment to inform decisions. Aware subjects seem to gain awareness through the learning process and can effectively sort through and analyze internal thought processes to solidify learning opportunities and respond appropriately. Those who did not exhibit awareness show dependence, like dependent learners described by Hammond (2015), on instructions and guidance through activities (Farber, 1963, Hammond 2015). In this case, I would argue that awareness would refer to cognitive skills that allow for productive struggle (Hammond, 2015, p. 12) and independent learning. Taking this view, independent learners are partly independent because they have learned to become aware of their thought processes and use these skills to understand the environment and create patterns for success. Dependent learners, in this sense, would be those who remained unaware.

A study by Barbara Hills (1959) used a process called The Taffel Procedure, to test subjects’ awareness of verbal conditioning, resulting in a reinforcement of verbal behaviors through positive feedback or what was referred to as ‘failure instructions’ in which the instructor instead criticized subjects’ choices during the experiment. Using simple sentence structures, subjects had the option to add the pronoun ‘I’, ‘you’, or ‘they’

to create a sentence. Experimenters first participated in the activity as either a neutral instructor, who gave no feedback during the first set of sentence formation, or a failed instructor who criticized the subjects' choices during the first round of sentence formation. After this initial set of sentences, the activity was repeated with a small change, the experimenter in the failure group no longer participated in criticizing subjects, and both experimenters began adding the word 'good' after any sentence created in which the subject decided to use the term 'you' to start this sentence structure. In this second round of sentence formation, both groups received the same type of feedback, but it became apparent that one group over the other seemed to have noticed the verbal reinforcements added. Subjects who were criticized for their choices in the first part of the experiment seemed to have less ability to detect or become aware of the positive reinforcers that may have been given. The findings showed that those in the failure instruction group experienced decreased ability to become aware during this experiment (Hill, 1959, cited by Farber, 1963). This is consistent with the idea that a person learns better in an environment that is safe and supportive and gives us insight into how the experience of negativity from ourselves or others may affect our ability to notice a change or effectively perform.

***Continuing on the Thought of Awareness, Problem-solving, and Self-talk.***

Reflecting on how thinking influences behavior, performance, awareness of our surroundings, and the influences of others, the importance of a reflective and considerate educator or any professional acting to help others is made evident. To promote a positive environment, consistent reflection and modification of the way that information is presented should be continuously addressed and reviewed. Our work should promote

awareness, positive thinking patterns, and effective problem solving. Problem solving skills, or deficiencies noted by Bloom and Border (1950), can manifest in subjects, creating instances of impulsive behaviors and defeatist mindsets when encountering problems where solutions were not quickly found and satisfied. Unrealistic expectations and ‘all or nothing understandings’ further create personal barriers and can bring about further emotional distress (Bloom & Border, 1950, cited by D’Zurilla & Goldfried, 1971). It is crucial at this point to notice that one person cannot undo or account for all other negative or unhelpful opinions and influences outside of their own space. So, how can we address concerns about subjects in our care who, despite our attempts to remove barriers and create a sense of safety in our environment, still present very negative or unhelpful feelings, viewpoints, or ineffective behaviors?

**How can we begin to help students become aware?** Thinking about the things that I can and cannot control in my classroom environment, I have come to the understanding that though I can do my best to influence and help create a safe and positive environment for students, I cannot always directly help students change their own internal beliefs about their abilities just through curriculum changes or building relationships. Some of this work to change these maladaptive behaviors and thought processes and build these problem-solving skills needed to feel more successful will need to start with how students think about themselves and their capabilities. In theory, becoming more aware and implementing strategies to change the ways individuals refer to, and think about themselves will help create positive change and promote more stable ideas of self-concept and perception of ability.

### **Is Self-talk Really Conducive to Learning and Performance?**

Self-Leadership Theory, proposed by Manz and Neck (1992), suggests a process of understanding and influencing our own self-talk and visualizations to perform better and become successful (Manz & Neck, p. 682). For the purposes of this study, we are not going to consider how this is helpful in the corporate world, as the researchers Manz and Neck were focused on, but instead, we are going to look more closely into the ideas of why and how we talk to and about ourselves influence abilities. These authors and researchers proposed that “individuals do have the power to manage their own thinking” (Neck & Manz, 1992, p. 682) and essentially have the power to make choices about how they think (Neck & Manz, 1992 p. 682-686). The idea that individuals can choose how they think opens up possibilities for creating positivity or at least working towards changing maladaptive behavior and patterns of thoughts created by our brains in an attempt to help us.

### ***Your Brain Means Well: What is Happening in the Brain During Stress***

Why would our brain lead us to these negative conclusions or focus so loudly on failure if these things limit us? Neuroscience explains that emotional reactions, particularly negative emotions, receive twenty times more attention from our brain than positive emotions due to a ‘negativity bias’ (Hammond, 2015, p. 66). Our brains are biased towards remembering negative information, though limiting, in reality, is meant as a protective feature to keep us out of danger and to recognize situations that cause stress in order to avoid these experiences. Early on in brain evolution, these negative feelings were more likely to be associated with dangerous life-altering experiences in which flight, fight, or appease instincts would help an individual stay alive. Modern stressors,

however, may set off these responses without these instincts being necessary. This leads to negative experiences that cloud opportunities and increase fear, frustration, and feelings of inadequacy, leading to internal beliefs and self-talk reflecting this adverse reaction and behavior response (Hammond, 2015, p. 66, D’Zurilla & Goldfried 1971).

Research shows that this negativity bias does not need to be the final word for understanding. Our brain may be trying to help us, but our brain is our own, and we can have influence over its thinking with enough practice. Managing our thought process can, in theory, be done by addressing ideas of problem-solving deficiencies, situational awareness, awareness of our own thoughts, and through changes in language and self-talk in order to support more positive views of self, influencing and resulting in possible changes in behaviors as well.

When thinking about self-talk Farber (1963) says one thing psychologists can count on is “our clients will talk, if only to themselves, and not infrequently, whether relevant or irrelevant, the things people say to themselves determine the rest of the things they do” (p. 196). Self-talk is defined as words or understandings we have of ourselves; this internal dialogue is used to help us understand ourselves and motivate or discourage an authentic knowledge or understanding of our capabilities. Self-talk is often rooted very deeply in our personal understanding of self-concept and internal beliefs of self (Ellis, 1962). Various studies in clinical settings and sports science have shown correlations of the practice of positive self-statements, or created statements about oneself, had positive effects on the performance of athletes, showing reports of higher ratings of confidence, the ability to self-reflect, build positive relationships and perform better at the tasks being presented before them (Neck & Manz, 1992).



Self-talk also affects emotional states. Ellis (1962, 1975, 1977) notes connections between self-talk and maladaptive thought patterns that may create irrational understandings of the world that can be harmful and cause emotional distress (Ellis, as cited by Neck & Manz, 1992). A potential benefit to changing or rationalizing self-talk and thoughts in positive ways is that a growing ability to identify and create rational thoughts will automatically help make more positive emotional states. Ellis states that “one may control one's emotions by changing the internalized sentence, or self-talk, with which one largely created these emotions in the first place” (Ellis, 1975, cited by Neck & Manz, 1992, p. 52). Creating a more positive internal dialogue will lead to more self-soothing behaviors. This positive mindset, supported further by positive self-talk, can benefit one's mood, decision-making skills, and self-concept by training our brains to focus more heavily on success and authenticity rather than failure.

### **But How? Strategies for Potentially Changing Self-talk.**

Meichenbaum (1971, 1974, 1975) and his various associates wholeheartedly seem to believe in the use of self-talk. Moreover, they are fascinated with the way self-talk could be changed. They have explored multiple effects self-talk could have on diverse groups of participants ranging from people who have schizophrenia, and other clinical diagnoses (Meichenbaum & Cameron, 1974), to individuals who exhibit hyperactivity and impulsivity (Meichenbaum & Goodman, 1971), and even college-age students who perceived themselves as lacking in creativity (Meichenbaum, 1975). In each study, Meichenbaum (1971, 1974, 1975) was looking at different populations for different ways in which he proposed implementing what he called ‘self-instruction’ or SI techniques. Participants who attempted strategies which required them first to reflect on what one

says to and about themselves and then work on creating new self-statements and phrases to replace their less helpful ones.

As Ellis (1975) and Manz and Neck (1992) suggested, Meichenbaum's (1971, 1974, 1975) 'Self-instruction' or SI training works by identifying and confronting dysfunctional beliefs and replacing them with more rational ideas (Ellis, cited by Manz and Neck, 1992, p. 693). This type of maladaptive thought process can also be recognized in individuals whose thought processes are distorted by extremes, pushing thoughts away from rationality, and into 'all or nothing thinking' (Burns, 1980, cited by Neck & Manz, 1992, p. 693). Rationality can come back into play as a positive and effective self-talk component.

Meichenbaum's SI training program has shown positive results for a variety of people, focusing on his study regarding college-aged students' performance and self-concept of their abilities to think and act creatively. We can find the effects of SI training on a more generalized group than in some of his other studies. Through the study on college-age students and creative thinking, Meichenbaum (1975) was able to see the effectiveness of SI training in relation to another similar intervention referred to as a 'focusing' (p.133) technique, in which participants spent time becoming aware of and continued to talk about the feeling they experienced during their thought process, but made no attempts to change these thoughts or feelings. This focusing group later reported feelings of improved measures of creativity and their capabilities. Still, interestingly, despite changes in thought, these participants in the 'focusing technique' group did not show substantial evidence of growth in these capabilities regarding their actual performance. Whereas the self-instruction group not only reported feelings of

higher-level ability to act creatively but during evaluation, the record showed that an individual's ability to think and perform creatively was changed as a result of the experiment (Meichenbaum, 1975).

Reviewing the literature around these topics, my theory of why the SI group was able to both have a change in feelings of self-esteem and self-confidence, as well as achieve an increased measure of instances of rational thought is because of the use of rehearsal, continuous changes of words, reflection, and the conscious allowance for new considerations to be made. The addition of error correction and self-soothing techniques within created scripts could also be generated to help reform 'all-or-nothing' thinking patterns (Manz & Goldfried, 1992). Using these self-soothing techniques within script formations subtly addresses and quietly helps individuals practice problem-solving skills, which when underdeveloped can lead to doubt and dependence as discussed earlier regarding abilities to problem-solving, and its effects on independence (D'Zurilla & Goldfried, 1971). Having created this method to address negativity in an attempt to verbally renegotiate thoughts out loud and then more covertly has created opportunities for participants to renegotiate the thought process and begin the process of rationalizing and noticing patterns of truth or realistic ideas of self and experience.

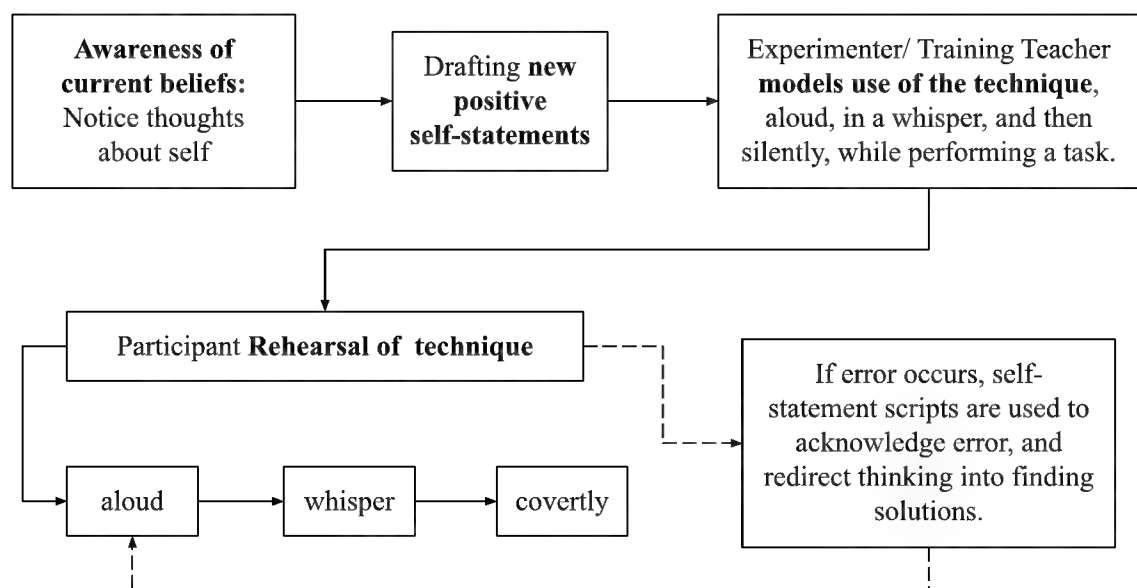
Meichenbaum and Camerons (1974) and Meichenbaum and Goodmans (1971) use of self-instruction with children considered to be highly impulsive, and those with schizophrenia used SI as a behavior-modifying program. When tested along with other theories, SI again seems to show more promising results for participants due to their perceived ability to internalize and at times generalize their experiences with this strategy. The procedures in these studies stay the same, starting with noticing thought

patterns and beliefs. New self-statements were generated consisting of new phrases and ideas that were then modeled by the experimenter, rehearsed by participants, out loud, in a whisper, and then silently to themselves. One main difference in these studies was the addition of self-scripts that acknowledge and leave room for considering errors when working through tasks.

### Self-talk, Self-instruction, and Perceived Errors

Noticing that errors or perceived errors on the part of participants seem to cause a great deal of distress and left some unable to regulate their feelings and behaviors after error making, scripts including ways to address these errors began to be taken into account so that participants could switch scripts if an error occurred in order to try and keep negativity from hijacking the brain during work time. This allowed more flexibility and created an alternative scripting sequence that could be turned on at any moment when needed (Meichenbaum & Goodfried, 1971 p.116-118) *Figure 5* illustrates the process taken to implement self-instruction techniques.

#### Self-Instruction Technique



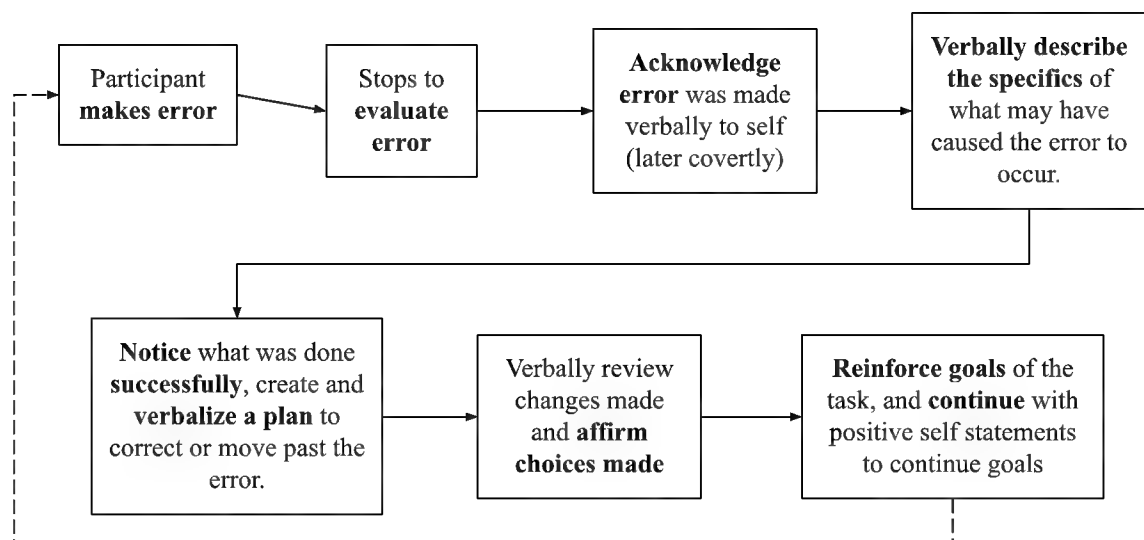
*Figure 5.* Self-Instruction Process.

For example, if I was working on teaching drawing using a skill set like a one-point perspective, there are important components to consider to help create realistic space. Adding one line in a different visual plane can quickly confuse and disrupt the illusion of space. This type of drawing with young students is often frustrating at first and can be a common place where an error occurs early in technique learning; feelings of self-doubt can easily occur during these types of structured technical skill sets in the art room. The struggle can be very productive and lead to great feelings of success and better comprehension of spatial understanding over time, but for some students early on, may cause self-doubt, and individuals may become easily discouraged and respond to the challenges with the creation of negative self-talk.

In implementing SI with additional error support, we create scripts that would keep away the spiral of negative thoughts by having a backup plan or scripts that are open enough to acknowledge that the error took place and can be accepted and changed.

*Figure 6* shows how an error acknowledgment in self-statements can be implemented.

#### **Introducing Error Acknowledgement in Self-statements.**



*Figure 6.* Error Acknowledgement in Self-statements.

The following is an example of a made-up script someone might use to reassure themselves during such a time: *'I see that this part does not look right, something feels wrong about my picture'* or *"I don't like how this looks right now."* Then proposing a solution to this problem within the script, *'If I erase this piece, or change this part I can try again to make the line that I wanted'* or, *'What can I change to make this feel better again for me?'*, *'What do I see here that I do like or think shows strength?'* and then reaffirming the change or idea. The solution is verbally reinforced with a description of what is needed to adjust. For example, *'I can erase this line and make a new one. This time I will look first and go slowly. I will draw slowly and add what I need until I like it again. I am going slowly; I have made a new line. Good, I did well this time. I can always go back and look for a new way.'*

Meichenbaum and Goodman (1971), referred to this technique as an additive to the self-instruction technique, including an 'error in performance' (p.117-118). Allowing this error to be involved in the development of self-statements creates an accommodation that promotes positive problem-solving behaviors that are self-reinforced by participants. These error scripts work to interrupt feelings and negative thought patterns before they can completely derail the learning process or activity being attempted.

Self-instruction training creates the possibility of creating positive change for students' mental perspectives of themselves and their capabilities, without heavily addressing or attempting to change the origins that led to these feelings (Meichenbaum, 1975). The idea that this process will help promote self-confidence and address the role of negativity or self-doubt in the classroom is so important. These strategies will help students move towards independence in the art room. This technique will also allow me

to address the emotional needs of my students, promote problem-solving skills, and teach self-reflection and regulation skills. All of these things can be adapted for any project, and generalized to new situations, while maintaining students' privacy, without causing too much emotional stress associated with evaluating why we feel the things we feel. Self-instruction will help promote thought and help participants become aware of self-talk, but does not necessarily require anyone ever to explain why, but instead evaluate the helpfulness or non-helpfulness of our language use in our lives.

### **Gaps in the Literature**

The most notable examples of self-doubt and lack of confidence reported in my classroom came from the way students speak about themselves or their work. These feelings can create varying behavioral concerns which prompted me to focus on the use of personally resonant language in this study. Many of the sources that were found have focused on creating safe and reflective teaching practices, understanding the causes of behaviors and their relation to learning, and strategies for using internal dialogue to reflect or influence one's own self-concept. Few sources were found that focused on creativity and thought process, none of which spoke to the experiences of younger children. Sources that focused on art education and internal dialogs in relation to self-concept, or ability, were not found. Of the literature found focusing on internal dialogue and its effect on learning and performance, the majority of studies focused on college-aged students or adults in corporate settings. The few referencing children had a focus on modifying behaviors in children regarding a particular diagnosis and did not focus simply on modifying or looking for ways to support or create confidence in learners. This case study addressed the gap in the literature by focusing on the

implementation of strategies to improve the way elementary-aged students talk about themselves in order to conclude if language use about self influences one's perceptions. As well as conclude if and how changes may affect student work and behavior over time. This study relates my findings to those included in my literature review in a way that has not been considered so far in this specific area of education.

### **Summary**

For productive learning to happen in the classroom for all students, a sense of safety and belonging needs to be developed. Safety is a base need for students' success and should be reflected on by teachers and other educators consistently to create an ever-evolving and reflective environment for students which is safe and considerate of who they are (Byron, 2018, Hammond, 2015, Minahan, 2019). Beyond the need for a safe environment, the development of cognitive abilities and effective problem solving skills help support and create independent learners, which in turn helps to alleviate negative self-esteem and conceptions (D'Zurilla & Goldfried, 1971, Farber, 1963). Building on positive coping skills and emotional regulation is supported by the consideration of self-talk, and through the creation of self-statements in which negative terms and phrases used to describe one's capabilities are reworked. Through self-instruction, training is modeled, rehearsed, and silently practiced, which can help support change in internalized negative beliefs, further helping to motivate and change behaviors that will allow us to be able to succeed. Research shows the strong connections between how people feel about themselves and their performance. Self-instruction training, particularly with the added structure of error processing, can be significantly effective in helping students reform their understanding without crossing barriers or



creating an unsafe classroom environment. It is for all of these reasons I decided to investigate a modified use of these techniques in my classroom, specifically with participants that exhibit a need for intervention in the art room in order to gain independence and feel more positive in their work and advancement.

### CHAPTER III: METHODOLOGY

#### Design of the Study

##### *Setting*

The research for this study was conducted at a suburban Elementary School, = in Pennsylvania near the Philadelphia area. During the time of the study, this School District was a public school district made up of three schools, an elementary school consisting of students from kindergarten through fifth grade, a middle school with students from sixth through eighth grade, and a high school with students from ninth through twelfth grade. Students in the Township were automatically eligible to attend this school district unless their guardians choose other school options. I have redacted the name of this school for privacy reasons, and will refer to the school by the pseudonym Willow Tree Elementary school

This study took place in the district's elementary school, which consisted of approximately one thousand one hundred students from grades kindergarten through fifth grade during the 2021-2022 school year. This building had one main level with a half-level basement and a second-floor area; a recess yard was located at the back of the building. An enclosed courtyard space was used for recess for younger students in kindergarten through second grade. The art classroom was located on the first floor in the back corner of the building.

Due to COVID-19 guidelines and restrictions regarding seating requiring three-foot distances between students, nine large tables were utilized as student seating within the art room, all of which had three or four stools for students to occupy. One small table with one stool was also available for students to use if they requested a private

or more specious spot for their class. The teacher was also limited to a smaller space due to restrictions and utilized a cart near the front of the room as a desk and demonstration area this year to maintain district and CDC-created guidelines of safety. The entirety of the surface areas against the walls on the left side of the room was filled with pre-installed open shelving, where paper and student projects were stored. A door leading to a closet space housing a kiln and other more delicate supplies was located against this wall; a do not enter sign was installed on the door, and no students were permitted in this closet space. Three student sinks were available in this room in a small island space in the back. One 'teacher-sized' sink existed behind the student's sinks. This space was not accessible to students this year as it was being blocked by classroom furniture that had to be moved out of the way to create more spacing for tables with the required three-foot minimum distance outlined in the district protocol. The right-hand side of the classroom consisted of smaller built-in cabinets used for storage, a heating unit, and large windows and countertops. These surfaces were used to store supplies students were utilizing for projects; these spaces were open for students to retrieve materials during class independently. In addition to these countertops, a rolling cabinet and counter space was also used as a supply counter for students to access materials; this rolling counter was pushed into the right-hand corner of the room. This counter blocked access to parts of the countertop dedicated to the paper cutter that only the teacher can access.

The front of the room had a built-in angled closet and counter in one corner. Unfortunately, this counter was too high for elementary students to reach, so it was used instead as a display area for books that connect to the curriculum, artworks from students, material sample studies, and a collection of various objects that could be borrowed by

students for observational drawing and inspiration when needed. Also along this wall was a whiteboard that functioned as a smartboard projector. Around the projector, visual notes, vocabulary resources, student artwork, and teacher messages for students were displayed.

All students who attend Willow Tree Elementary School were enrolled in various specialty classes within a six-day cycle; these classes were called Encore classes. During a six-day Encore rotation, all students in the school would receive one scheduled art, health, gym, and general music class. The remaining two days in the cycle would vary; students attended library, technology, or STEM class. For part of the year, a counseling class would substitute a library or health class for the day. The rotation allowed for about thirty art classes to be taught within each grade level during the school year, with some variations created by field trips, schedule changes, and assemblies that affected routine class meetings. Each class is scheduled to run for exactly forty minutes. During the study, fourth-grade classes had closer to thirty minutes of class due to a scheduling issue that ended their recess at the moment class began, creating time barriers as students traveled indoors. This scheduling conflict could not be rectified during the study.

The school had one elementary art teacher responsible for all students in the school. All elementary students received general art classes in the art room along with their homeroom class and a few other students from other placements who would split up to fit the six-day cycle rotation. Class sizes ranged from twenty-six to thirty-six students. The majority of classes had thirty-three or more students per class; third-grade consists of the most students, with all six sections of classes having thirty-four to thirty-six students present in the classroom.

### *Participants*

The eligible study participants were students between first and fifth grade who were enrolled in Willow Tree Elementary School and fit the criteria that will be discussed below. Students did not need to have a diagnosed condition or any other precursors for inclusion beyond the following criteria to be considered for this study. The teacher's previous data identified potential participants during the school year consisting of observational data records of students' participation and needs in class. The teacher regularly kept records of students' maladaptive behaviors in the classroom when observed. These observations include records taken on the following:

1. The use of negative self-talk as overheard by the teacher or used by students during individual conversations to describe themselves or their abilities.
2. Teacher-perceived procrastination on the part of students.
3. Instances that seem to arise from student frustration that results in damaged work due to excessive erasing or attempts to 'correct work,' or impulsive actions in which students discard or purposely damage artwork when personal expectations are not immediately met.

Taking into consideration that all people may at times feel frustrated and act impulsively or use language about themselves in social situations that they may not mean; only students who had been observed or overheard displaying these maladaptive behaviors consistently between the months of September 2021, and January 2022, were considered for participation in this study. Potential participants were observed or overheard displaying maladaptive behaviors during the beginning stages of artmaking three or more

times by the researcher within this four-month span. For the purpose of this study, the beginning stages of creation were defined as the first five to twenty minutes of independent work or planning time. Students who reported negative self-talk verbally, or began displaying maladaptive behaviors during this time frame were considered as showing signs of self-doubt. In order to be eligible for participation in this study, the researcher needed to have observed and recorded one or more of these behaviors on three or more occasions during the current school year between the months of September through January.

Due to the strict eligibility guidelines, only ten students between first and fifth grade were identified as being eligible for the study; of these ten students, four guardians granted their student permission to be part of the study. Due to the limited racial and ethnic variation of eligible students, and the four students who joined the study, the demographics of the study did not range widely. Students were given the option to opt-out of sharing any demographic information.

Of the four participants, two students were eleven, one student was ten, and the final student participating in the study was eight years old. Three of these students were in fifth grade and one was in second grade. Two participants identified themselves as white or caucasian, one identified as Russian, and the remaining student opted out of sharing this information publicly. Three of the participants identified as male and one identified as female. Participants chose their own pseudonyms for the study, and their pseudonyms also correlated to a color code which was used for filing and identification of their materials and in any comparison data and charts used throughout the study. A list of participants' pseudonyms and color codes can be seen in *figure 7*. It is interesting to

note that of the eligible students identified, all participants who were granted permission to take part in the study reported interest in art and had shown engagement and regular participation in class discussions.



Figure 7. Pseudonyms and Color Codes

### ***Researcher Role.***

As the only art teacher at Willow Tree during the time of the study, students viewed the teacher-researcher as an authority figure and art expert in the room due to the structure of the schooling environment and the fact that I was an adult in their life. Even though I was an authority in the room, I had facilitated a good rapport with my classes and continuously worked to build positive relationships with my students to aid in the creation of a safe and open-minded environment. This was, and will always be a continuous effort on my part.

In the study process, I needed to act as a researcher, model, and teacher to help students learn the coping mechanisms and new strategies proposed in the study. As a teacher and model in the room, I needed to facilitate a safe place where students felt comfortable sharing their opinions and feelings without judgment. I helped create this space by sharing the same level of openness with my students in order to model the skills and trust needed for students to genuinely participate and generalize these strategies for use when needed. As their teacher, I implemented two main ways of reducing frustration in and out of the classroom, one of which involved the teaching of short art-making activities that were used in order to calm down, regulate, or reflect on emotions, and one in which focuses on noticing and carefully changing the way we speak and think about ourselves during moments of frustration and throughout the creation process. More focus

was given to the latter as these coping strategies were needed to help create more desirable artmaking experiences.

As the teacher in this classroom, I needed to act as a model for these techniques, sharing my own experiences of frustration and doubt in relation to my thought process and abilities. During the modeling process, I needed to actively create new scripts to reassure myself of what I was doing as I worked, and needed to model this technique as authentically as possible to help with trust-building in this process. As someone who had a history of self-doubt and low self-esteem, I believed it was essential to be genuine during this modeling process to help create more validity for students and encourage them to be open-minded to the process, which may feel very silly, or like a joke at times. These scripted self-statements and scripts needed to be developed for each individual in order to have personal meaning and value related to their specific thoughts about themselves and their abilities. The teacher helped students create these short statements in which they can begin rehearsing to themselves during times of frustration, creating both lists of statements to say before beginning an artwork and a list of statements to use to continuously motivate themselves as they worked. In addition to practicing these dialogs and participating in drawing activities, students also had the opportunity to share their feelings and observations before and after activities through exit tickets, self-assessments, semi-structured interviews, and short dialogs with the teacher-researcher. Students were assured that these activities were not part of our graded classes but were opportunities to reflect and hopefully gain confidence in themselves and their abilities.



***Research Procedures***

In order to complete this study in the time allowed, I came up with a plan to meet with students outside of their regular art classes. This ensured enough time was allotted to learn and implement the strategies explored in the study. This was due to the nature of the six-day cycle of classes and the recognition that scheduling changes, holidays, and other various interruptions to the school schedule impacted the number of times I see each of my classes during the completion of this study. I ensured that I had an adequate amount of data to analyze, by creating an alternative time to meet with students outside of their regularly scheduled art class, meeting students individually also had the added benefit of allowing for student privacy, and gave the teacher-researcher the chance to take careful observations during training sessions.

Students participating in the study received training in the proposed coping strategies regarding the use of self-statements and had the opportunity to try out more open-ended art activities during individual sessions once per week. Each session lasted between fifteen to thirty minutes and was conducted during the last block of the school day, or after school during dismissal. The study measured feelings of confidence during artmaking. Artmaking activities were incorporated into training sessions for students to actively create and utilize self-scripts during creation in a way that felt more natural and allowed for immediate practice. Students regularly reported their thoughts and feelings regarding the SI training and technique using self-reflections, exit tickets, and one-on-one discussions.

During the first two classes after the introduction of the SI training, frequent check-ins were made during the students' regular art class periods to remind participants

to implement the strategies spoken about during the individual sessions in class.

Reminders to remain calm and consider their self-talk and language were given as needed throughout the study. The teacher-researcher continued to keep observational notes on students' performance and reactions during class time and independent sessions as part of the study.

### ***Ethical Considerations***

Informed consent was acquired from the site's building administrators on January 31st, 2022 before participant permissions could be sent out. Students and their guardians were provided with informed consent forms before the study began. A description of the study and the researchers' intent were shared with guardians in order for them to make the initial decision for their students. Students were also informed about the purpose of the study in an age-appropriate manner in order to give their consent to be in the study as well.

All students' names associated with the study were changed in order to protect their privacy, all data taken was secured and locked away when not in use or kept on a secure computer. Participants did not receive any form of payment or incentive for participating in the study. There was no obligation for students or guardians to remain or fully participate in the study once it began. If a student or guardian had elected to fully remove their student from the study, all data regarding that student would have been dismissed from consideration and appropriately discarded. Students had the choice to participate in training sessions and could decide to refrain from its practice or change our interaction at any time. All student information and artifacts were returned to the student or properly disposed of at the conclusion of the study to ensure privacy had been kept.

***Researcher Biases***

As I was the only art teacher in the elementary school at this period of time, I had the opportunity to get to know the majority of eligible students in the study over the course of one or more years. This existing knowledge and the rapport I had with my students could have influenced the study if I used previous knowledge to make assumptions about students and their feelings or reactions to the study without their input. To prevent this personal bias, I actively reminded myself to remain an active listener and observer, recording observations objectively without imposing my own ideas about students' responses to the data. To help keep myself accountable, I audio recorded and transcribed all individual sessions with participants to help create more accurate observational data. Student responses and reactions were captured in the students' words whenever possible, to try and limit interference with my personal knowledge and prior experiences with participants.

As an artist and art teacher, I also need to recognize my personal bias about the ability of art to reduce stress and anxiety and as a vehicle for understanding oneself and the environment. These are personal connections that I have made to the creation of art and strongly feel connected to. I need to consider that not every student will have the same experiences that I have had in creating art and may not feel the need to use art as a tool in this way. I also need to consider my own personal experience with self-doubt and negative self-verbalizations in terms of creating works of art. These feelings are very personal and have been a substantial concern for me as a young learner that continued into my present working relationship with art and other facets of my life during this time. It was vital for me to remain aware of my feelings and experiences and their origins in

my early childhood art-making experiences to try to refrain from projecting my experiences onto other students' experiences.

In this study, I was not looking to solve the origins of these maladaptive feelings and behaviors; I was not qualified to address those concerns with students in my current field and needed to continually be mindful to keep away from trying to solve problems. I frequently reminded myself to focus on more immediate student needs and help them notice what and how they are thinking about themselves and their work. This allowed students to be more independent and attempt to change their use of language to cope with changes and negative feelings during creation without crossing ethical boundaries.

As previously stated, I recognize that as a teacher and researcher, as well as a person who has benefited from the use of art-making experiences to relieve, reflect, and understand myself and my experiences, I am biased because I believe that art-making can be used as a tool to self-reflect and reduce anxiety responses. I also recognize my personal history as a young person experiencing low self-esteem and negative verbal interactions with peers, authority figures in the school setting and within myself has further influenced my interest in this subject matter and has solidified my understanding of the importance of language use in the formation of an individual's self-concept. These biases have only been further affirmed by research findings included in the previous literature review, which suggested that the way we speak to ourselves internally correlates with our understanding of self and our abilities. These biases have been acknowledged; this researcher has worked to remain objective in order to maintain the validity of the results in the study.

*Limitations*

Some limitations of the school environment and class rotations were acknowledged and addressed in this study. The increased focus on distance, cleaning procedures and social interactions within the school environment was much more regulated at this time due to continued efforts to maintain health and safety as we navigated through the health crisis, COVID-19. This required students to maintain a three-foot distance from the teacher and other students while working, mandated the need for continued mask-wearing while indoors during the majority of the school year, and was only lifted halfway through the study, and required strict use of seating charts in the classroom. These guidelines were district-mandated and were followed. Working within a six-day cycle meant that the amount of time that I had with my students during the year and during the study was limited, with the addition of field trips, schedule changes due to assemblies, half-day schedules, and holidays that push back the rotation to a further date, the time between one class and the next for a student often consisted of a longer break then six school days.

The majority of data for this study needed to be collected between February and April 2022 to align with deadlines associated with the coursework being done at Moore College of Art and Design. This did not leave a lot of time for me to potentially see and work with my students during their normally scheduled art class. Additional opportunities for students participating in the study to individually meet with me during a different time in the school day had to be made. These individual sessions were limited to a fifteen to thirty-minute block at the end of the school day between 2:30 and 3:20 p.m., during which time the teacher-researcher had their regularly scheduled preparation time for the

day. The building principal granted the teacher-researcher the ability to request student participants to be pulled out of class to meet with them at this time. Students also had the ability to meet with the teacher-researcher after school and during dismissal when approved by guardians.

The number of student participants remained small partly in consideration of other classroom teachers, so as not to cause too many disruptions to their regular scheduling. The number also remained small as the criteria for participation in the study was very specific regarding individual behaviors. Only students who exhibited these qualities were considered potential participants of this study. Time in all settings of this process was limited. The amount of time students had to respond to reflections and exit tickets was regulated in order for other activities to be done during the additional weekly sessions and to avoid tardiness between classes during regular art class sessions. No work during these sessions was graded as they were intended only to aid the participants' development of independence and confidence in class. Semi-standardized interviews were reserved for individual sessions with students and were limited to two sessions during the course of the study, one at the beginning and a final interview.

Participation in the study was limited regarding the criteria previously mentioned. No kindergarten students were considered for this study at this time, as not enough data on students' self-perception of their abilities had been collected yet from this subset of the school. Participants could have included students from grades one through five with various degrees of interest in art-making. The study focuses on individual students' behaviors and expressions and was not intended to be a reflection on all elementary-aged students in this setting or other settings.

***Research Methods***

For the purpose of this study, I utilized qualitative research methods by having students produce small artworks, and assessing their self-reflections, ability rating scales, exit tickets, observations of student behavior, and use or nonuse of learned coping strategies. These materials and protocols assessed changes in students' self-esteem, by noting any increases, or decreases in independence and/or frequency of observed or reported maladaptive behaviors, such as negative self-talk in the classroom. This research was not used to resolve the origins of students' self-doubt or self-esteem but instead focused on helping individuals develop skills and strategies that supported independence and resiliency in the art classroom when met with personal challenges or frustration. Research showed that the longer these types of behaviors and feelings continued to manifest without intervention, the more challenging and harmful these feelings may become as they become more internalized long-term (Brunzell, T., Stokes, H., & Waters, L. 2016). Working with students early on in their development was important to the researcher. The art-making activities presented in individual sessions and the individual development and practice of using scripted positive self-statements were utilized as strategies that could support student well-being and personal value in the classroom. In addition, semi-structured interviews were used in order to gain insight into students' thought processes and to help students work on developing their personal self-statements and scripts that were utilized in the classroom setting.

## **Data Collection**

### ***Context***

A holistic approach to data collection was taken by using multiple forms of qualitative data throughout the study such as; interviews, observations, visual artifacts created by participants, participant made scripts, photograph logs, and other written reflections and evaluations such as self-assessments, exit tickets, ability rating scales, and written reflections. An effort was made to retain the current classroom environment and the relations between the researcher and participants. Due to the young ages of those in the study, consistency in expectations and rapport was important to maintain in order to keep students at ease to avoid inaccurate results due to students' reactions to the researcher's demeanor, and to avoid feelings of being singled out within the whole class environment. Observations were heavily utilized throughout the study and were semi-formal in nature; these were conducted during individual sessions. Observations were focused on the interactions of the participants with other students, the teacher-researcher, and the tasks being presented. Observations tracked maladaptive behaviors and perceptions of students' independence. The researcher avoided making the participants feel observed and took notes covertly, and when students left the room to avoid creating an uncomfortable environment for participants or other students.

Interviews were used to help gain an understanding of what students are thinking and feeling with a little more detail; students had the opportunity to share their experiences verbally. These interviews were used and compared to observational data and artifacts collected to look for changes that had arisen in the data. Efforts were made to



ensure that all interviews were done individually and without interruption in order to retain privacy.

Throughout the course of the study, participants attempted to create, rehearse and internalize self-statements meant to alleviate stress during art-making situations. Students were expected to verbally rehearse out loud within the normal art classroom environment. All self-instruction training was completed on an individual basis, so students had the privacy to practice the self-instruction training suggested by Meichebaum (1975), which requires students to rehearse out loud a series of statements to help guide them through activities. Privacy was important because this beginning stage of using this technique required participants to speak to themselves out loud, which could have caused an anxiety-driven experience or just an embarrassing one in the art classroom. These individual sessions were used exclusively for rehearsing aloud in an attempt for students to be able to move through the process and begin using covert language in the regular art class to avoid any skewed results due to social concerns. Small art activities will be done during these independent sessions as well in order to have something for students to practice using these skills on while in this more private setting.

The main goal of the study was to promote more independence and feelings of confidence in the art room through these changes. At the end of each individual session, or typical class period, participants were asked to complete a short exit ticket or self-reflection about their experiences using the self-instruction technique. Students used these worksheets to answer questions about feelings of confidence, or ability, whether the techniques taught were used, and if they were effective or not, they also had a section to

share any other reflections about the day they felt I should know. Blank versions of these student worksheets can be found in *Appendix C*.

Although the vast majority of the students in my classes did not participate in the study and did not learn the modified self-instruction model I attempted to teach to the participants of the study, SI training was reinforced in the regular art classroom for all students. I continuously began using similar phrases and reminders in class to work through problems by first identifying the undesired mark or section using specific language, and then proposing and trying out new ways to edit this section to ‘fix’ the mistake to create an equitable learning environment, where participants did not feel singled out in the classroom. I knew if students were singled out, it could lead to negative thinking which would have been counterproductive. Students were encouraged to participate as fully as possible with this technique, and the teacher-researcher participated with students in modeling and creation of artworks during some sessions, the teacher-researchers also shared with participants, and other students how they utilize these self-instructional techniques in their own life.

### ***Literature Sources***

Using inspiration from various studies by Meichenbaum and his associates (Meichenbaum & Cameron, 1974, Meichenbaum, 1975, Meichenbaum, D. H., & Goodman, J. 1971) on whom I based much of my initial claim, I decided to follow the guidelines regarding a qualitative case study in order to collect in-depth data and evidence to either support or disprove my claim that when practiced, changing the way language is used to describe one's abilities, can help alleviate experiences of self-doubt in elementary-aged students. Meichenbaum and his associates have effectively used intrinsic

case studies involving various populations in order to discover how using language in a scripted way could affect participants in various ways. Meichenbaum used various pre-created psychological tests as measurements of change throughout his studies, which he supported further by using the interviewing process and questionnaires in his studies (Meichenbaum & Cameron, 1974, Meichenbaum, 1975, Meichenbaum, D. H., & Goodman, J. 1971).

For the purpose of this study, I engaged participants in interviews, observations, and student self-reports or reflections as part of my qualitative data collection. I did not use the same type of measurements and tests that Meichenbaum and other researchers have used to understand the results or participants' changes in feelings and performance. I am refraining from these tests because they are meant for psychological evaluation and understanding, which I was not qualified to administer, understand or interpret. These evaluations were also dated, the majority of which having been dated back at least thirty years or more from the time of this study, which may have resulted in some concerns regarding equity and current validity for all participants when taking these tests. By not engaging in them, I have avoided potentially biased testing procedures and refrained from using tools I am not qualified to be utilizing.

The use of qualitative research methods is also beneficial for this particular study because it will allow me to focus on a target group of students who are experiencing similar patterns of behavior or reported frustrations. Creswell's (2013) description of qualitative research indicates that it is a practice involving interpreting things in their natural setting using a variety of artifacts and other forms of representation in order to make sense of an event or experience. Creswell also speaks to the use of a case study as a

way to explore a problem using the experiences of each participant as a way to look closely at and work to understand the situation better. (Creswell, 2013 pg. 43-44, 97)

These forms of research were chosen as the most beneficial for my study as it allowed me to observe and notice maladaptive behaviors more closely and notice individual, changes or challenges in participants' feelings or understanding as interventions were added during the course of the study.

### ***Methods of Data Collection***

Students participated in individual sessions lasting between fifteen and thirty minutes once a week and attended their regularly scheduled art class once during each six-day cycle. The focus of each weekly session was on sharing experiences and participating in self-reflection to acknowledge and challenge unhelpful beliefs about our abilities. Identified beliefs, and language that were ineffective, or unhelpful, were reframed or rethought using SI and error scripting; participants practiced generating and utilizing self-statements in class and during individual sessions. The researcher participated in the experience as a model of both the SI technique and reflective practices based on their own experiences to help model and build the level of trust needed to maintain a positive, and supportive environment when sharing. Small drawing activities were introduced or chosen by students during sessions. Participants heard similar phrasing and suggestions repeated in their typical art class regarding problem solving techniques learned in independent sessions as reminders to use and begin to generalize the ideas and experiences they had between class and individual sessions.

**Observations.** The majority of the data taken in the study was through student observation. Due to the young ages of my students, observational data was very helpful in gaining a more accurate understanding of skills learned or practiced and helped me to track different types of behaviors in the classroom. Observation of students' work, class participation, and independent practice allowed the researcher to gain information about student progress without disturbing students' concentration or social interactions during work time. Observations were informal and took place during individual sessions and regularly scheduled class times in which the participants were present in class. This observational journal protocol was primarily used to gain specific information about student behavior and reactions. Reflections utilized the same observational protocol in and out of the regular class setting. For the purpose of the study, new data was not taken on any days that were scheduled as half days in the district or on days in which students were only partially present in the class due to early dismissal or other disruptions of the normal schedule, with the exception of one typical class session.

The study began for all participants by the third week of February and lasted until May 12, 2022, about fifteen informal and small-scale observations were made for each participant who completed the study, about seven of them being in the regular class setting, and the remaining having been conducted during individual sessions. These individual sessions took place at the end of the school day between 2:30 and 3:20 p.m. for fifteen to thirty minutes, depending on participants' availability, or during dismissal between 3:25 and 4:00 p.m. Observations during individual sessions were audio recorded and transcribed with guardian and participant consent and was used as a way for the researcher to validate and enrich their observational data. The researcher kept reflections

and notes following all observations. All participants and guardians gave consent to audio recording, however, if any participants had wished to refrain from audio recording, only researcher notes and reflections would have been utilized for observational data collection. The researcher was mindful to keep more detailed note-taking practices during individual sessions with participants. In class, observations were not recorded in any permanent way as I did not have informed consent from all students in attendance. The researcher acknowledged the fact that in-class observational data could not be as carefully documented and verified. Observations were recorded by the researcher using the observational protocols mentioned here and in *Appendix B*. Observational data was also connected to protocols designed for individual SI training sessions, and art activities protocols, which talk of the conditions of the environment which was observed. These protocols can also be found in *Appendix B*.

**Interviews.** Two interviews took place with participants during the study; these interviews were semi-formal in nature. Semi-formal interviews were chosen to allow for flexibility in our interviews and to reframe questions as needed to ensure students understanding and aid in clarification as required. Particularly with young students, the need to clarify questions for students as well as your understanding of students' answers was vital for accuracy in student responses. It was essential to use a framework that would be flexible enough to create accommodations as needed. It was also important to maintain a feeling of safety and support and to refrain from creating situations where formality may confuse or create uncertainty for students who were not used to me speaking in a very formal fashion. I was careful to use question frames that used language that students were used to me using in their typical class in order to maintain good

rapport and consistency for students. The age of these students had to be kept in mind, seeing as there were considerable changes in comprehension happening in elementary education even within one grade level. Semi-formal interviews were scheduled for our first meeting and as part of a post-reflection, all of these interviews took place during individual sessions in order to maintain privacy.

**Artifacts.** Photographs of students' artwork and various self-reflection forms from individual sessions and regular class sessions were photographed if they were helpful or informative to understanding and documenting students' feelings or progress during the process of this study. This looked like records of destroyed works or activities participants refused to do, completed first as practice or other information to inform another artwork, or given up on. No photographs were taken of students themselves and artwork was only photographed after individual sessions to track students reported feelings of competence or incompetence regarding their perceived abilities.

All artifacts of students' work were recorded via digital photography, and photos were appropriately secured. Students' names and identifying components of the work were edited to conceal personal data, one participant's work is noticeably altered on a few of his works and I needed to conceal designs he created using his real name. I also gathered samples of students' handwritten scripted self-statements and other forms of reflections and exit tickets; that reflected on our practice of coping mechanisms during the study. These items were also digitally photographed or photocopied. Photographs were logged individually for each participant and organized by date/event, room was left for the addition of notes if needed.

**Researcher Logs and Journals.** The researcher kept two information logs to help organize information. One log was used to track student attendance of individual sessions and interviews to help organize and see where students were in the process and helped in scheduling or rescheduling sessions.

A general log was kept by the researcher to help organize information about what happened during the study. I recorded my reflections, major observations and cataloged my interaction with students. Reflections were consistently structured to reflect on what was noticed or major themes from the past two to three weeks.

Journals were also utilized as an alternative way to respond to the interview process. If participants would rather go through the interview process non-verbally, journals including the interview questions would be made available to process these thoughts. If utilized, these journals would have been less structured than the interview and would have included specific questions during the two semi-formal interview sessions. Student journals would have been collected and photographed before being returned to students. Though this was an option for participants, no participants in the study utilized this option.

**Audio recording.** Students' guardians granted permission to use audio recording in the study; these recordings were only taken during individual sessions and utilized a voice recorder. These recordings were used to gather data about the process of creating self-statements and working through the process of understanding and utilizing the self-instruction technique suggested. Recordings were kept on a secure drive on my personal computer. Audio recordings were transcribed by hand or through a transcription service. That information was used to help validate observational data taken over the



course of the study, and to gain detailed information about student behaviors and thoughts during the interview process.

### **Data Analysis**

#### ***Organization of Data.***

All data from the study was collected and organized first by type of session, individual weekly session or class period, and session number. It was labeled further with the date for further reference. Each participant's data was grouped on its own throughout the study; these two subsections were further broken down into types of data gathered in order to track participants' experiences and observed patterns. Each individual's data was compared to itself over time to see if changes in perception or confidence could be discerned. Verbal data was collected and transcribed, and further coding was developed to make connections between similar concepts, words, and feelings about the process and noted behaviors. Participants' data from the study was analyzed through a narrative lens; a few instances in the study were compared or contrasted when similar themes or responses to similar stimuli occurred and were used to help create a better understanding of the results.

#### ***Coding of Data.***

Data from individual sessions or typical class cycles was broken up into common expected categories within each session type, such as observed behaviors, completion of work, use or nonuse of learned strategies, and participants' reflections or feelings during each session. These categories were evaluated differently during individual sessions and in-class sessions to ensure participants do not feel singled out during their regularly scheduled art classes. All student information will be housed together in a

student-specific colored folder and separated between session types and sequence of these classes. All data collected was assessed together to gain an overall understanding of the participants' experiences and was looked at carefully for changes that occurred as a result of the study. Trends were explored as they emerged through the data and were made evident through the coding and organization of materials. Verbal data and reflections were examined for specific themes regarding students' feelings of independence, reported use or nonuse of strategies gone over in independent weekly sessions, and general feelings associated with making artwork or implementing strategies.

### ***Methods of Analysis.***

All participants in the study, identified by a chosen pseudonym, had a secure, designated spot to store any student-created, and regularly needed materials within the classroom; all other physical data taken by the researcher was stored in a secure location off-site when not in use. This space was labeled with participants' chosen names for the study and remained locked up when materials were not in use. All digital files and photographs were also stored via a secure device, all data was labeled and separated by participant. The only physical works that were not collected and stored in this manner were materials produced within the regular class period when all students participated in class and received similar instruction and phrasing to guide independence and problem solving skills. Though the observations and reflections during these class sessions were analyzed, anonymity was important and no participant was purposely singled out through a separate collection of materials. The work created during class were also materials we often needed several times during the following classes and I maintained an effort not to change any previously created routines in the classroom. Materials created in the regular

class setting would only have been separately stored if a participant specifically asked for this to happen, which was not the case during the study. Once the information was sorted by each participant, it was further separated and labeled with session numbers and types, as well as data types.

This structure was important in the analysis of materials as I was looking for moments of change in perceptions and feelings over time. This structure also helped create a system for keeping materials secure and consistently grouped. Change over time was noted, compared, and broken down into categories of observed behaviors such as; maladaptive behaviors, auditory observations pertaining to the use of language with peers or teachers, observed use of self-instruction technique or other coping strategies and notes on students independence in class whenever it was possible to record. Student reflections, regarding the reported use or nonuse of learned strategies during different situations, and participants' reflections or feelings during each session were compared to see if techniques were being used or attempted and if the use of the self-instructional method for the reframing of internal dialogs created any reported changes for participants feeling of success in the art classroom, along with behaviors in the classroom or in quality of student work produced.

Observational data and artifacts were heavily relied on during normal class settings, to refrain from signaling any student out during a large group session. Individual sessions utilized transcriptions as part of observational journal entries to help create valid results, self-reflection, and the creation of small works of art to aid in information gathering. All data collected was looked at as a whole, following the progression of the study over time, to gain an overall understanding of the participants'

experiences and any noted changes or common themes generated. Changes in maladaptive behaviors, negative language use, and teacher perceived independence were monitored closely along with other emerging themes seen in each individual's data set that was used to code and process student experiences. Verbal data and reflections were examined carefully for specific content regarding students' feelings of independence, reported use or nonuse of strategies gone over in independent weekly sessions, and general feelings associated with making artwork or implementing strategies to note when and how strategies were used or if they were used to aid the participant.

Student participants' work as stated earlier was looked at together to get a picture of an individual's progress and willingness to use the strategy taught independently. Participants' experiences were also later compared for common thoughts, struggles, and themes seen in created self-statements, in order to create inferences about the use of the self-instructional technique as an effective, or ineffective technique for fostering resiliency, independence, and perceived levels of confidence in elementary-aged students which will be reviewed in Chapter V. Specific information and description of these coding methods and individual participants' experiences will be detailed in Chapter IV as data is reported.

### **Timeline for the Study**

Before beginning the case study, I presented my thesis proposal to the IRB review board on January 22nd, 2022. The final proposal for the study was then submitted on January 24th, 2022. After receiving official approval from the IRB review board, official approval to conduct my case study was sought and obtained. Materials for the case study were continuously developed and prepared, and potential student

participants were considered. In late January through early February, permissions from potential student participants were sought.

Once permissions were obtained from guardians and student participants, I met with classroom teachers to ensure the understanding of the goal of the study and the importance of consistency and regular attendance of students who would need to meet during the end of the day for individual sessions to avoid future complications. I began my coursework at this time as well to prepare myself to enter the field and continued gathering and revising the materials needed to conduct the case study. The first initial round of interviews was scheduled with student participants, and the first official data collection began on the week of February 14th, 2022. Individual sessions also began on the week of February 14th, for all participating students. Materials and recordings of artifacts were collected weekly for data collection and analysis. Final interviews were given during the students' last individual session; all interviews were completed by May 12th, 2022. Small art activities were conducted during each individual session. Self-scripts were continuously created, rehearsed, and revised during individual sessions. All participant artifacts and visual data were collected for final analysis after the final interview and all work was coded and analyzed. *Chapter IV: Results of the Study* was completed by the end of May. *Chapter V: Discussion and Implications for the Field* was completed by the end of June. Final edits on the whole thesis were made by July 13th, and presented on July 30th, 2022.

Month	Process	Steps Completed
<b>December</b>	Compiled relevant information for the proposed study.	<ul style="list-style-type: none"> <li>Completed AEGR618 course requirements.</li> </ul>
	Literature Review	<ul style="list-style-type: none"> <li>Continued to refine and add to the literature review.</li> </ul>
	Prepared materials for research	<ul style="list-style-type: none"> <li>Developed materials needed to help guide and document the study.</li> </ul>
<b>January</b>	Proposal Hearing	<ul style="list-style-type: none"> <li>Participated in a proposal hearing on January 22nd, 2022.</li> </ul>
	IRB Approval	<ul style="list-style-type: none"> <li>Submitted a full proposal on January 22nd, 2022.</li> </ul>
	Sought official site approval	<ul style="list-style-type: none"> <li>Upon IRB approval, Willow Tree Building Administrators were contacted via a letter of intent.</li> <li>Approval was received on January 31st, 2022.</li> </ul>
	Preparation of materials for research	<ul style="list-style-type: none"> <li>Continued to develop materials needed to help guide and document the study</li> </ul>
	Identified and sought participant permissions	<ul style="list-style-type: none"> <li>Distributed IRB-approved permissions for potential participants.</li> </ul>
	Prepare to launch the study	<ul style="list-style-type: none"> <li>Began coursework to prepare to enter the field.</li> <li>Checked that pre-made materials and activities were properly prepared.</li> <li>Tested audio and transcription processes.</li> <li>Met with the classroom teachers of participants to ensure understanding of the goal of the study and the importance of consistency and regular attendance of students' individual sessions..</li> </ul>
<b>February</b>	Identified and sought participant permissions	<ul style="list-style-type: none"> <li>Distributed and collected IRB-approved permissions for all participants. Received four participant permissions back.</li> </ul>
	First interviews with students	<ul style="list-style-type: none"> <li>Scheduled first interviews with participants.</li> <li>Completed all first interviews by February 28th.</li> </ul>

<b>February cont.</b>	Individual sessions begin, continuing once each week.	<ul style="list-style-type: none"> <li>● Began initial weekly individual sessions starting the week of February 14th, 2022</li> <li>● Discussion and initial introduction to creating and using self-statements, began developing personal self-statements.</li> <li>● Self-statements will continue to be explored, and revised during each session.</li> <li>● Small works: ‘low risk’ art prompt or method exploration.</li> </ul>
	Data Collection and Analysis	<ul style="list-style-type: none"> <li>● Weekly data from class and individual sessions was analyzed pertaining to observations and self-reports of stress or worry during the artistic process, use of strategies taught during individual sessions, and artifacts created.</li> </ul>
<b>March</b>	Weekly Individual sessions	<ul style="list-style-type: none"> <li>● Continued weekly individual sessions</li> <li>● Continued to develop personal self-statements.</li> <li>● Self-statements continued to be explored and revised during each session.</li> <li>● Small works: ‘low risk’ art prompt or method exploration.</li> </ul>
	Data Collection and Analysis	<ul style="list-style-type: none"> <li>● Weekly data from class and individual sessions are analyzed pertaining to observations and self-reports of stress or worry during the artistic process, use of strategies taught during individual sessions, and artifacts created.</li> </ul>
<b>April</b>	Weekly individual sessions	<ul style="list-style-type: none"> <li>● Continued weekly individual sessions</li> <li>● Continued to develop personal self-statements.</li> <li>● Self-statements continued to be explored and revised during each session.</li> <li>● Small works: ‘low risk’ art prompt or method exploration.</li> </ul>
	Data Collection and Analysis	<ul style="list-style-type: none"> <li>● Weekly data from class and individual sessions are analyzed pertaining to observations and self-reports of stress or worry during the artistic process, use of strategies taught during individual sessions, and artifacts created.</li> <li>● Began designing ways to code data.</li> </ul>
<b>May</b>	Weekly individual sessions	<ul style="list-style-type: none"> <li>● Continued weekly individual sessions, the last session was conducted on May 4th, 2022.</li> <li>● Self-statements continued to be explored and revised during each session.</li> </ul>

<b>May cont.</b>		<ul style="list-style-type: none"> <li>● Small works: ‘low risk’ art prompt or method exploration.</li> </ul>
	Data Collection and Analysis	<ul style="list-style-type: none"> <li>● Weekly data from class and individual sessions are analyzed pertaining to observations and self-reports of stress or worry during the artistic process, use of strategies taught during individual sessions, and artifacts created.</li> </ul>
	Final Interview	<ul style="list-style-type: none"> <li>● Scheduled and completed final interviews with participants, the last interview was completed on May, 12th, 2022</li> </ul>
<b>May - June</b>	Data Analysis	<ul style="list-style-type: none"> <li>● Organized reflections, observational journals, logs, exit tickets, artworks, reflections, transcriptions, and any other artifacts from participants for review.</li> <li>● Analyze and completed coding of data taken</li> <li>● Continued working on Chapter IV and V</li> <li>● Concluded any miscellaneous data collections</li> </ul>
<b>June- July</b>	Drafting	<ul style="list-style-type: none"> <li>● Refined Thesis chapters, editing</li> <li>● Finished writing and editing Chapter V</li> </ul>
	Presenting	<ul style="list-style-type: none"> <li>● Thesis was presented on July 30th, 2022</li> </ul>
<b>August</b>	Thesis Exhibition	<ul style="list-style-type: none"> <li>● Presenting and Exhibiting Thesis</li> </ul>

Figure 8. Timeline for the Study.



## CHAPTER IV: RESULTS OF THE STUDY

### Overview of the Chapter

In this chapter, the process and results of the data collection will be reported. Beginning with a recap on the goals of the study, the chapter then will go on to reflect on the unanticipated realities of the research settings, an overview of the structure of individual sessions and data collection processes, and the participants, looking more closely at the individual participants and what specific factors made them eligible for participation in the study. The rest of the chapter consists of a narrative account of each individual's data compiled throughout the study. Conclusions about this data will be drawn in *Chapter V, Discussions and Implications for the Field*.

### Goal of the Study

This study was conducted to address the teacher-researchers growing concern regarding the confidence levels and instances of self-doubt and low self-esteem in elementary-aged students. A technique for recognizing negative beliefs or language use, and reframing such language into more helpful phrases, was explored. The research question can be viewed below.

*Given that elementary-age students can express reticence and poor self-esteem while planning and making their art, and Meichenbaum (1975), suggests that using scripted prompts or statements can help students speak more authentically about themselves, how might art educators use this technique to help students reduce self-doubt while creating?*

The study was looking to see if using a technique called self-instruction, along with error acknowledging self-scripts, a specific type of self-script used in the self-instruction process, could benefit students' reported, or observed levels of confidence and independence in the art classroom.

### **Notes About Setting**

The research setting was carefully detailed in *Chapter III: Methodology*. The study took place in the elementary art room where participants regularly attended their art classes. During the study, two unexpected situations arose that could not be resolved. The first of which was that the heating and cooling unit, which historically did not work well in this classroom, dysfunctioned further and had to be shut down completely. This complication was not able to be resolved during the study, the environment was never cold; however as the weather outside began to warm up, the classroom became hotter, which was not always pleasant. Student participants did not complain or appear to notice this issue as much as the researcher, who spent all day in that environment. For transparency, I felt this situation should be noted, as this physical sensation could have affected how some participants felt or reacted during the study.

One other unpleasant reality affected two of my four student participants' individual sessions. Two of my participants' individual sessions took place during dismissal while students were leaving school as arranged with guardians so these students would not miss any instructional time in class. Before beginning the study, I spoke to my building principal about turning off the classroom speaker in my classroom to avoid the distraction of bus dismissal announcements. Although he tried to accommodate the request, this was never actually accomplished, and no alternative setting was available. I

attempted to muffle the volume of my speaker by covering it with minor success; bus dismissal was a reality we had to live with for the entirety of the study. These two participants were very gracious and understanding of the situation, for which I am very grateful, but I know it was an annoyance to talk over, and could at times be a distracting and unpleasant experience that should be noted as an unfortunate norm that may have affected the research conditions and results for these two students.

### **Introduction to Data Collection Process**

Data collection took place over the course of thirteen weeks from February 16th, 2022 through May 12th, 2022 in the art room of Willow Tree Elementary School, a public elementary school in Huntingdon Valley Pennsylvania. The final participant interview was conducted on May 12th, 2022 concluding the data collection process for all participants.

### ***Data Collection Norms.***


Four students participated in the study. Participants attended their regularly scheduled art class every sixth school day in a six-day cycle according to their schedule, and an additional weekly session was held for each individual to learn and rehearse the SI technique privately before attempting to practice on their own. Regularly scheduled art classes and curriculum were not modified during the study, however, the teacher-researcher did slowly introduce similar language and guidance in the typical art class setting that was taught during individual training sessions to help create a common language and thought patterns among student participants and their peers. This was done in all classes, both with and without student participants present. These language and problem-solving sentence frames shared with all students can be found in *Appendix D*

and will be shared later on in the chapter. As explained in *Chapter III, Methodology*, several forms of qualitative data were taken during this study including participant interviews, student self-reflection forms which included an ability rating scale, in-class exit tickets, student artifacts, and researchers' observational journals. The following sections will go over the general process and norms of how the study was implemented and data was collected from beginning to end. This will be followed by an introduction to the participants. The remaining sections of this chapter will tell the stories of each individual's experience and interactions with the SI training and process.

**Permissions.** Before beginning the study, site permissions had to be granted by the building principal, a review of the literature and methodology was given to administrators, and goals were explained. A site permission form was then sent to the principal and permission was granted on January 31, 2022 (*figure 9*). Once permission was granted, potential participants were asked if they would like to take part in the study, and guardian permission forms were sent home with ten potential students starting the week of January 31st. Participants had a week from the day they received their packet to return it to the teacher-researcher. Guardians were also contacted via email and phone to clarify and answer any relevant questions about the study. Permission forms can be referenced in *Appendix A*. Out of ten eligible students, four guardians granted their students permission to be part of the study.


**APPENDIX A: Letters of Consent & Permissions**

**Research Site Consent Form**

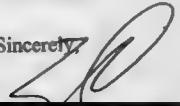



Jan 31, 2022

To Whom It May Concern:

I, Scott Cole, give permission to Tara Drissel to conduct an action research study at  during the spring 2022 semester in order to fulfill the requirements of their Master's thesis at Moore College of Art and Design. I understand that this project is intended to research the implementation of an individualized, self-reflective strategy in the art room for recognizing and renegotiating negative internal dialogues. Changes in participants' perceptions of competence or self-confidence, as well as changes in observed behaviors, will be explored through the creation and rehearsal of participant-created, replacement dialogs. The strategy will be supported and rehearsed through the use of artmaking opportunities promoting self-reflection and exploration in the elementary art classroom.

I understand that Tara Drissel will be a teacher-researcher who will be teaching art while gathering data during their regularly scheduled art classes and during individual sessions with participants during their preparation period from 2:35-3:15 most school days. I understand they will be collecting data using various methods, including observation, participant interviews, visual artifacts, such as student artworks, created scripts, practice activities, participant reflections, and exit tickets.

Sincerely, 




MOORE COLLEGE OF  
ART & DESIGN  
IRB APPROVED DATE  
 1/27/22

Figure 9. Site Permission Form.

**Interviews.** Once permissions were granted, initial student interviews were scheduled. All initial interviews took place between February 16th, 2022, and February 28th, 2022, and needed to be completed before training could begin. Interviews were semi-formal in nature and took place in the art room during students' first individual

session. Upon arriving at the classroom, students were greeted and asked to pick a comfortable spot in the classroom to sit. The teacher-researcher found a spot across from the participant and the first interview was conducted following the interview protocols established; the complete interview protocol can be found in *Appendix B*.

The initial interview consisted of questions that were used to gain an understanding of students' views and beliefs about art and art-making, as well as other interests and passions students may have for other subjects or hobbies. Participants were asked to try and think carefully about how they have practiced perseverance in various hobbies and to consider how skills were developed over time. The focus was on students' thoughts about their artwork and feelings during the creation of artworks. Follow-up or clarifying questions were asked when needed to aid the researcher, and participants, understanding. All students completed their interviews in one session, except for one student who needed an extra session to complete the last few questions, as she was very thorough in her answers and got a little off-topic at times. Interviews were audio-recorded and later transcribed. Information learned was used to help the researcher plan for each students' first SI training and was used as data for comparison throughout the study. The questions for the first interview can be found in *figure 10*. More information on interview I and II can be found in *Appendix B*.

### **Interview I Questions**

1. For the purpose of this study I need to give you an amazing code name to keep your identity secret, do you have a secret code name in mind? If not, do you mind if I pick one for you?
2. I wanted to ask you to tell me a few things that you love to do. Did you have to work hard to learn any of these things?
  - a. Was there ever a time that \_\_\_\_\_ was really hard for you?
  - b. What did you do?
3. What do you think about making, or looking at art?
4. Do you ever make art outside of school, if so, what kind?
5. Do you think art is something everyone can do? Why or why not?
6. I want to talk to you about our art class, how do you feel about the work you do in art class?
  - a. Why do you feel that way? We can look at your most recent artwork if you want to.
7. Do you ever feel worried in art class about your abilities?
8. Would you call yourself an artist? Why or why not?
9. What do you do when you get too worried or stressed?
10. Are there any art activities you really do not like?
  - a. If so, which materials frustrate you?
  - b. What about them frustrates you?
11. Do you think the way you feel about art or making things can change?

*Figure 10.* Interview I Questions

**Observations.** Data collection for all participants officially began after receiving guardian permission forms. Some participants' in-class observations began before the first interview or SI training sessions. The primary form of data collected during the study was observational in nature. An observational protocol was created for documenting student behaviors and other notable reflections and observations. This protocol was designed to be used in all settings where students would be observed making art. An empty template can be seen in *Figure 11*, and a more detailed description can be found in *Appendix B*. Observational journals were used to keep track of site conditions, including class or

individual sessions, the number of people present, etc.; as well as document what was worked on and students' responses to the work they made. Maladaptive behaviors were tracked carefully and specifically when observed, along with all forms of coping strategies students practiced if applicable. Student accommodations were also included.

Observational Journal Protocol	
Date:	Time: Length of Observation:
<b>Demographic Notes:</b> Student Code Name: Grade Level: Observation site: Type of setting: Check or fill in one Typical Art Cycle: <input type="checkbox"/> Individual Session: <input type="checkbox"/> Number of Students present: Number of Adults in the room:	<b>Class Setup:</b> <div style="border: 1px solid black; height: 150px; width: 100%;"></div>
<b>Objective of Session or class</b> <b>Materials Chosen</b> <b>Maladaptive behaviors observed?</b>	<b>Coping technique attempted?</b>
Yes: <input type="checkbox"/> No: <input type="checkbox"/> If yes what type: SI technique: <input type="checkbox"/> Break: <input type="checkbox"/> Social: <input type="checkbox"/> Artwork: <input type="checkbox"/> Other: <input type="checkbox"/> Notes:	Accommodations made:
Other notes:	Other notes:

Figure 11. Observational Protocol Template.

**In-class observations.** In-class observations began the moment the researcher received permission from guardians; this means that some observations were taken before the first interview or SI session for some participants. The researcher utilized the observation protocol template (*figure 11*), but due to the fact the teacher-researcher was actively teaching and working with all students during class, less detailed descriptions were made. Other forms of data reported by student participants were given more weight



during these sessions. In-class observations gave the researcher important information about changes in students' independence or dependence on the teacher.

**Individual session observations.** Observations taken during individual sessions were more extensive as the researcher could focus on the participant's actions and responses during artmaking. Audio recordings were also taken for quality assurance and validity during independent sessions. Audio transcripts were generated and used as additional observational data that was added to this log, and excerpts of conversations were taken and coded as evidence of students' experiences and thought processes over time.

**Individual session norms and student reflection.** Individual sessions were created to help student participants learn the process of self-instruction training technique (Mechinbaum, 1975). For a review of the SI process and the similarly helpful process of creating error scripts, refer to *figure 5* and *figure 6* or see *Appendix I*. Students typically met with the teacher-researcher once a week in the afternoons for individual sessions. Each participant had an official meeting time and day, but accommodations were made to this schedule when conflicts arose or to account for lost time due to student absence. An attendance log for individual sessions can be found in *Appendix D*.

During individual training sessions, students went through a sequence of events. Students would briefly chat with the teacher-researcher and find a spot in the room to sit. After checking in with the student about their day and other recent events, the teacher-researcher began explaining or reviewing the self-instruction training process. The first two sessions included a full demonstration of the researcher performing, or modeling the SI process out loud while making a work of art. This full demonstration was

repeated at various lengths when students showed signs that they needed a review.

Students always began by thinking back to their personal beliefs noticed during our first interview, and any other negative self-talk realized in discussion in and out of class that was problematic. Time was spent crafting new phrases or sentences using positive or more authentic language that could be used as a statement to tell one's self before starting a work of art, or as a reminder and encouragement to continue to work through mistakes, errors, or challenges. A list of all student participants' self-scripts can be found in *Appendix D*. Specific student scripts will be shared later in the chapter. These lists were reviewed every session and additions were made when necessary.

Once our review was completed and participants appeared ready, they would begin by picking a number to receive a prompt for their art activity for the day. Students had the choice to choose a different prompt or to create their own theme for the session if requested. These prompts were meant to be low-stress, open-ended ideas, or reflective themes that could be interpreted freely, which is why flexibility was given. For a list of the possible art activity prompts, see *figure 12*; for the art activity protocol see *Appendix C*.

Prompt #	Art Activity
1	Make an artwork by exploring different ways to leave a mark.
2	Make an artwork by using repeated shapes and lines.
3	Create your own patterned artwork.
4	Create a mandala (or zentangle 5th grade only).
5	Create an artwork that uses a lot of texture.
6	Sound inspired drawing: Listening to instrumental versions of a current popular song.
7	Sound inspired drawing: Listening to meditative music.
8	Using color and mark making to show specific feelings.
9	Use color to show how you feel at this moment. Why did you choose these colors and images?
10	Use color and imagery to show something positive in your life. This can be a person, a place, a think or and idea. Why do they make you feel good? Draw something to represent your positive.
11	If worry or fear had a body, what would it look like? Can you make a friend for your worry or fear to help it feel better?
12	What or who are you grateful for? Make a small artwork or write a letter to those you are grateful for.
13	What inspires and excites you? Or What are you looking forward to?
14	If I were a superhero I would _____? Or I can be a hero by _____?
15	Finish the phrase "I am..." five different ways. Choose one of your statements to illustrate.

Figure 12. Art Activity Prompts

Once a theme was decided, students were given the art activity and self-reflection worksheet template seen in *figure 13*, students assessed their feelings of confidence in their ability to complete the chosen prompt or theme on a five-point rating scale utilizing smiley face characters. Students rated their feeling on competence as great, or confident, good, or a little worried, ok, or worried, upset, or very worried, and badly, or unconfident.

This was assessed again after utilizing the SI technique to create an artwork. Students were asked about their feelings regarding their ability to create art after using SI. This is different from whether students enjoyed their finished piece, and sometimes participants needed reminders that they were assessing their feelings on their ability to make work, and not their actual work itself. Students were also directly asked if they felt self-instruction or ‘helpful sentences’ as we also called them, were helpful in decreasing worry while working, along with explanations of why or why not.

**Art Activity Paper Student Self-Assessment**  
Please look at what you made and answer the questions.

1. Before you start: How do you feel about your ability to make your small artwork?

Great Confident    Good Little worried    Ok worried    I just Very Worried    Really Unconfident

**Fold here to hide!**

2. What did you make? Or what materials did you use?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. How do you feel about your abilities after practicing your special script sentences?

Great Confident    Good Little worried    Ok worried    I just Very Worried    Really Unconfident

4. Do you think your special script and sentences helped you feel less worried? How did it help or not help?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Anything else you want me to know?

\_\_\_\_\_

\_\_\_\_\_

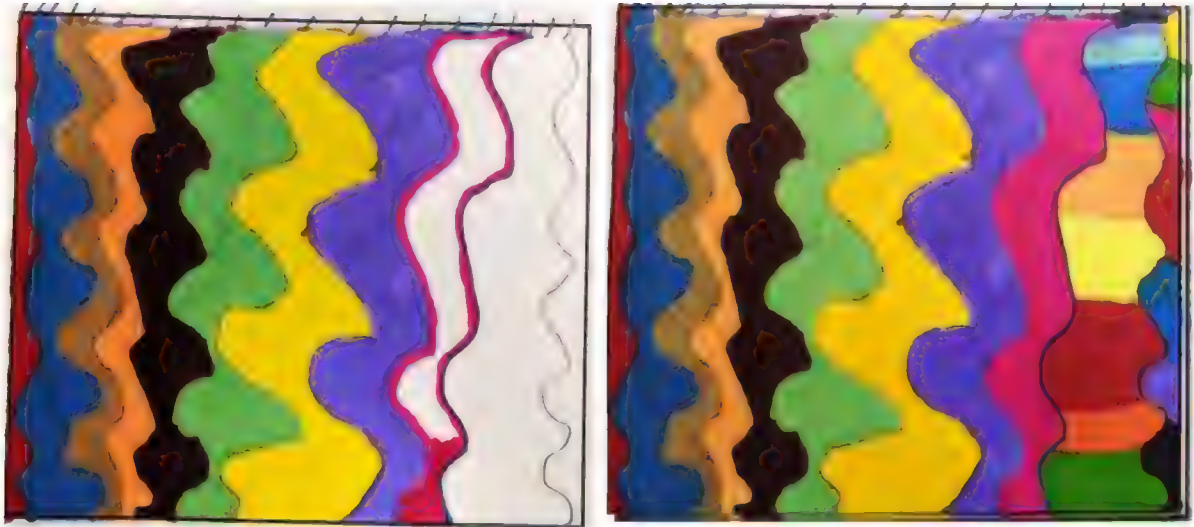
\_\_\_\_\_

\_\_\_\_\_

Teacher information  
Did the student have help completing this form?  
Yes \_\_\_\_\_ No \_\_\_\_\_  
Helped by: Teacher \_\_\_\_\_ Transcribed \_\_\_\_\_ other \_\_\_\_\_  
Initials of helper \_\_\_\_\_

Figure 13. Student Self-assessment and Art Activity Worksheet Template.

Transcripts were very helpful in collecting more thorough details about students' thoughts on SI as the teacher-researcher asked specific questions to try and gain more elaborate answers from students. Students always had the option to continue works of art over various independent sessions, as we can see in *Figure 14* of Blue Monster's work titled, *I am an artist*.



Blue Monster's "I am and artist" Prompt 15, work over two SI sessions 4/6/22 and 4/20/22

14. Examples of Blue Monster's artwork completed over two sessions.

**In-class sessions and norms.** As noted earlier, observational data was taken in class to see how or if SI training was helping students in the classroom setting. During these classes, the language the teacher used was similar to that heard in individual sessions. I began to use a generalized process of SI training without the use of rehearsal in class with all students as a problem-solving strategy. *Figure 15* and *figure 16* show the slides that were made into posters and used in class with all students as a reminder to think through and practice active problem-solving. An audio recording was not used in in-class sessions and students were encouraged, but not required to use the SI training taught.

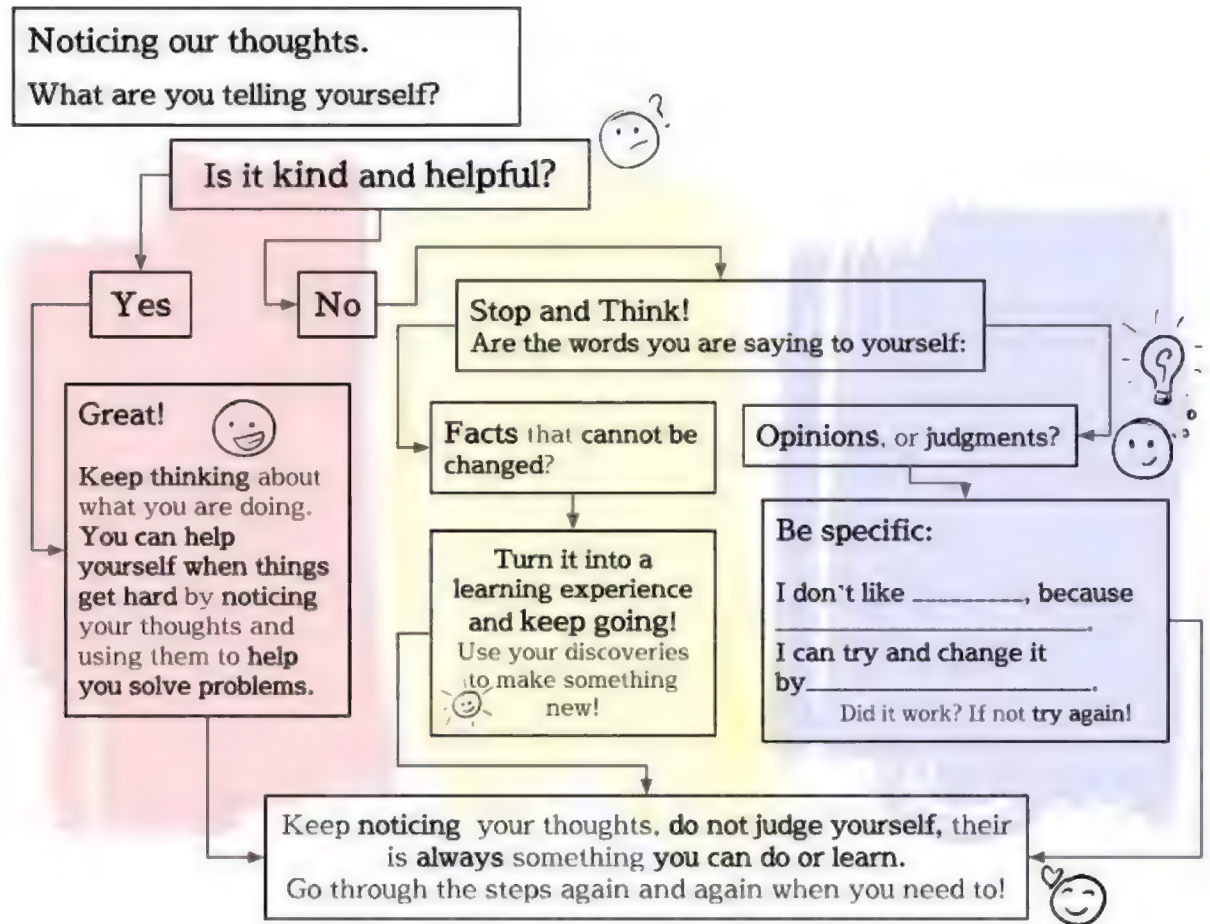


Figure 15. Student-friendly diagram of generalized SI process for whole-class instruction

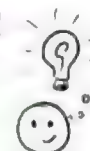
I think I made a mistake 😞?

This is **what happened**, I was \_\_\_\_\_,

I don't like the result **because I feel it is** \_\_\_\_\_

(Say **exactly what is bothering you**, say **facts**, no opinion words!

Think, When or where did your feelings change?)



I can try to **change** this part by \_\_\_\_\_

(Talk yourself through it! You know yourself best.

😊 You have the BEST ideas for you!

Questions about materials or safety? Talk thought your **ideas with teacher/ classmates.**)

**Think. Did your change work?**

If not try again from the start! Don't give up!

**You've got this!**



Figure 16. Student-friendly generalized scripted error self-statement/ guide for whole-class instruction.

**In-class exit tickets.** Student participants filled out a simple exit ticket at the end of class. The questions on this exit ticket can be found below in *figure 17*. This exit ticket was used along with observational data to track if students independently used the intervention training taught, helping to make connections between observed behaviors and the use or nonuse of this technique.



**End of Art Class Exit Ticket**

Code Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. I made or worked on an artwork today:



2. I felt worried or unsure today when I was making art.



3. I thought about, said, or read the sentences I made to help me if things got hard.



4. If you used your sentences, did they help?



Anything else you want me to know?

---



---



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For Teacher information:  
Did the student have help completing this form?  
Yes ☐ No ☐

Helped by:  
Reading: ☐ Transcribing: ☐ other: \_\_\_\_\_

Initials of helper: \_\_\_\_\_

Figure 17. Exit ticket Questions



**Interview II Final interview.** A final interview was given to all but one participant in the study, which will be addressed later during their specific section in this chapter. The completion of a final interview concluded individual participant data collection in this study. In this interview, students were asked to share their feelings and opinions about self-instruction as well as their experiences over the course of the study. Some of the questions asked in Interview I were reassessed to see if or how student perceptions had changed over the last thirteen weeks. Students were asked about their opinions on creating and using self-statements, changes in how they felt about their ability to create art, and overall feelings through their individual journeys with this intervention strategy. *Figure 18* shows the questions asked in Interview II. The entire interview protocol is found in *Appendix B*.

**Interview Questions**

1. The last time we had an interview I asked you to tell me about your ideas, you told me you thought art ( is or is not) something everyone can do. Do you still think that is true? Why or why not?
2. How are your feelings about art right now?
  - a. Do you think you can make art? Why or why not? We can look at your most recent artwork if you want to.
3. We have been working together to create helpful self-statements or helpful sentences by writing, reading, and thinking about what we are doing, and what we can tell ourselves when making art gets hard or we start to worry. I want to ask you a little more about that if that is ok?
  - a. We have been trying to look and listen carefully to the words we use when we are working to make sure the words we use to talk to ourselves are kind and helpful. Do you think it is important to think about the words we think and say about ourselves?
  - b. How did you feel about writing your own self-statements or 'helpful sentences'?
    - i. Was this really hard for you to do?
    - ii. Did it get easier to do with practice?
  - c. Do you think repeating these sentences out loud or in your head when you make art is helpful? Why?
    - i. *If a student mentions or infers the use of an error script: I think you are talking about making an error script. When we dislike how things are going, or make a mistake and talk about it and how it could change we are using our sentences to correct an error. Did you find error scripts helpful?*
  - d. You reported trying/ not really using this technique in regular art class, how did you feel about using your self-scripts in class?
  - e. Have you tried, or will you try, this technique when you make artwork at home or for any other reason?
4. Was there an art activity prompt that we used during one of our weekly sessions that you really liked and made you feel good or confident in your abilities? Why do you think it made you feel that way?
5. Are there any art activities we used during one of our weekly sessions you did not like? If so, what made you dislike it?
6. Do you think any of the things we have been practicing, like making small artworks, practicing self-statements, and trying to change our words, have been helpful?
  - a. Have you noticed any changes in your feelings or ability to get started?
7. Do you think you can or will still use this technique now that the study is over?

*Figure 18.* Interview II Questions.***Introduction of Participants.***

As previously covered, students who became active participants in this study had to fit specific criteria to be eligible. For a student to be eligible to be part of the study, they needed to exhibit signs of low self-esteem, self-doubt, or maladaptive behaviors in the art classroom that impeded their ability to work independently three or more times between the months of September 2021 through January 2022. These instances of

self-doubt were recorded by the teacher-researcher, and of the eligible participants, four students were granted permission by their guardians to take part in the study. Three of these four students were in fifth grade during the time of the study, and one was in second grade. Participants chose their own pseudonyms for the study, and their pseudonyms also correlated to a color code which was used for filing and identification of their materials and in any comparison data matrix and charts used throughout the study. A list of participants' pseudonyms, color codes, and general demographic information as reported to the researcher can be seen in *figure 19*. More about these students and their specific eligibility for this study will be covered in the following section.

#### General Demographics of Participants

Participant code name	Age	Grade Level	Race/ Ethnicity	Gender	Art cycle	Planned SI Session meeting day/ time
Blue Monster	11	5	Caucasian	male	F	Wednesdays 2:45- 3:15 pm
Triangle	11	5	Caucasian	male	B	Wednesdays 3:20- 4 pm
Pastel	10	5	Russian	female	A	Mondays 3:20 - 3:45 pm
Raptor	8	2	Not reported	male	E	Tuesdays 2:50-3:20 pm

*Figure 19.* Pseudonyms, Color Codes and Self-identified Demographic Information

**Blue Monster.** Blue Monster was an eleven-year-old cis-gendered Caucasian male in 5th grade who has attended the school district since kindergarten and has participated in an art class each year. He attended a general fifth-grade art class once every sixth school day with the rest of his homeroom class from 9:10-9:50 am during the study. The teacher-researcher has only taught this student art for the past few years, having taken over for the previous teacher midway through Blue Monster's second-grade year. Blue Monster was a very dedicated art student and was always very attentive during instruction time.

Before the study, Blue Monster was very influenced artistically by one of his guardians, whom he considered a great artist. He had often remarked about this guardian's ability compared to his own, and would often express the need to be on par with their skill level in the arts. Before the study began, Blue Monster would often begin approaching his work optimistically, starting right away; however, once he made any mark he deemed a mistake, no matter the media used, he would often throw away, or crumble up his work as means to get a new paper, prior to asking the teacher or other students for assistance. He had also hidden or 'lost' artwork and distracted himself by talking to peers or effectively 'pretending' to work on his project quietly during class once frustrated. This student did not often ask for help when needed, so I would schedule several check-in moments in my lesson to try and keep this student on track and prevent them from discarding work or avoiding productive struggle when frustrated. During these planned check-ins, if Blue Monster was dissatisfied with his work, I would begin to hear negative self-statements emerge at a consistent rate in conversation. Things did not 'look right', were not 'perfect', or Blue Monster would remark on how he was really 'bad' and could not complete the assignment. During these moments, his perception of his guardian's abilities often became part of the description, stating that he wanted to be perfect at art like his guardian. It would take a great deal of time to help Blue Monster out of this negative thought cycle, and he would need my explicit attention at this time to not revert to avoidance behaviors or seek materials to start from the beginning again. Outside of the art room, Blue Monster has shown confidence in sports, and academically, and though he dislikes writing, he does well in these subjects and the worries he exhibits in art class do not seem to extend to his other academics.

**Triangle.** Triangle was an eleven-year-old, cis-gendered Caucasian male student in fifth grade who attended a general fifth-grade art class once every sixth school day with the rest of his homeroom class from 9:10-9:50 am. Triangle has attended this school since kindergarten and has participated in an art class each year. The teacher-researcher had only taught this student art for the past few years, having taken over for the previous teacher midway through their second-grade year. Triangle was a student who had shown great interest in art-making in the past. He participated often in discussions about artworks and artists we studied but had trouble expanding on his reasoning for his beliefs at times. Despite his interests, when conferencing with Triangle one-on-one, he was quick to report thoughts about his work being ‘bad’, particularly when working on realistic drawing techniques. Triangle would not directly tell you this, nor would he ask for help on his own; instead, he often exhibited avoidance behaviors when his work did not feel ‘right’ to him and would on several occasions sit quietly at his table doing nothing unless there was extensive teacher interference during these moments of avoidance.

Triangle had a positive disposition and often encouraged others in the classroom not to give up. He also talked confidently about his own skills when it came to sports and other activities. He would even say he was ‘pretty good’ at art and that he enjoys it when it does not turn out ‘bad’. I had noted over time that his language toward himself when he was displeased with something regarding art-making or any other activity could be self-deprecating, and often lead to the avoidance behaviors referenced earlier. These avoidance behaviors were quiet and non-disruptive and at times had been easily mistaken for quiet working. It was my worry for this student in particular that his quiet avoidance, procrastination, and kind words and encouragement for others would eventually disguise

his struggles, leaving his needs unnoticed by teachers as he moves through his learning career, which would negatively affect his learning and passion for art-making.

**Pastel.** Pastel was a ten-year-old cis-gendered female student who identified herself as being of Russian descent. During the study Pastel was in fifth grade and attended art class one day out of a typical six-day rotation of specials; her art class was forty minutes long from 9:10 to 9:50 a.m. and was attended with her homeroom class. Pastel has attended this school since kindergarten and I have been her primary art teacher since midway through her second-grade year. Pastel had shown love for the arts in all forms and was very expressive and thoughtful about art and its necessity in people's lives. She was very motivated to create in various forms and sought out extra opportunities to engage in various art activities. Pastel has had a history of academic struggles in a general education setting but found the arts to be a positive outlet. That being said she was also extremely critical of her performance and was often displeased by her efforts in and out of class. I have had deep concerns for Pastel's continued success and emotional state over the years. I had known her both in the regular education setting and in the art room since meeting her in her kindergarten year when I was only her building substitute teacher in this district.

Pastel was very concerned about her work as compared to other students, or mine as the teacher, and interpreted my abilities to be completely innate in nature despite my insistence that that was not true at all. Comparisons had been a struggle for her and she would often worry about the opinions her family members would have about the work she made, sharing worries about certain people in her life being embarrassed or unimpressed by her efforts. Pastel has gained increasing levels of talent and has put in the

hard work needed to be successful in art class, but she struggled to make progress on any project without extensive teacher support. This often led to the teacher needing to sit or stand next to Pastel and continuously encourage her with words and praise while she worked. This student, though capable physically, demonstrated consistent bouts of ‘all or nothing thinking’ as described in the literature review, as a type of maladaptive thought process that is distorted, and focused on extremes, pushing thoughts away from rationality, and into ‘all or nothing thinking’ (Bloom & Border, 1950, cited by D’Zurilla & Goldfried, 1971). Extreme highs and lows offered this student a feeling of either total success, or complete failure, without much ability to step back and recognize rational arguments for either expression (Burns, 1980, cited by Neck & Manz, 1992, p. 693).

These extremes left Pastel in need of help de-escalating her thought process when she began to become dissatisfied. Regularly this student would consistently insist that she ‘can’t do it’, is ‘terrible’, ‘embarrassing’, or declared she wants to be ‘good’ but still insists she is ‘not’ actually good. These types of phrases were repeated so often that they became a kind of mantra for the student at the time that would create more and more visible stress to the point that I would need to intervene with close proximity and my own continuous speech reaffirming the student’s efforts to help her stop repeating these phrases out loud to herself or her other table mates as I attempted to help her break the negative thought cycles. I had a great deal of worry that these ‘all or nothing’ thinking patterns would interfere with the students’ continued ability to feel satisfaction and benefit socially and emotionally from art-making experiences without an effective coping strategy and intervention put into place.

**Raptor.** Raptor was an eight-year-old cisgender male student who opted out of sharing other demographic information. Raptor was in second grade during this study, and he attended a general second-grade art class once every sixth school day from 12:00 - 12:40 pm with second-grade students from various homerooms. Raptor moved into the district in December of 2019. I have been his only art teacher since he moved into the district. Due to the COVID-19 pandemic, much of Raptor's first-grade art experiences were conducted online and/or asynchronously. The 2021-2022 year was the first year I taught Raptor face-to-face since the first few months he joined the school district. Raptor was a very energetic person, was known for making jokes, and enjoyed making people laugh. Raptor would thrive on attention of any kind and would often attempt to get it in both positive and negative ways. Raptor had a history of challenging behaviors and emotional responses that have impacted his general education classroom and other subjects but had been successful in the art classroom both in person and virtually. The teacher-researcher and Raptor had a very positive rapport since he began attending the school district. He regularly communicated with me about his feelings and frustrations, and misunderstandings in other classes and with his peers. He would often share with me his feelings of success over test scores or positive interactions and would give me many drawings he was particularly proud of or excited about.

Raptor was very motivated in art and loved the idea of being able to draw. During the time of this study, he became very interested in directing drawing videos online. He also expressed that these directed drawings were a source of discomfort and worry when it comes to making art because he would become very distraught with his work when it differed too greatly from the artist's teaching. He also would have the tendency of trying



to work on drawings that were beyond his current physical level of control and would be better suited for an older student. He did not particularly like being reminded and would often continue to choose directed drawing activities beyond his physical control.

In class, Raptor was very confident during group discussions. He enjoyed sharing his thoughts and opinions and loved performing in any possible format for other students. Raptor could have a hard time staying focused in class even when engaged in his project, could be very easily distracted by other students, and would either voice his displeasure loudly to others or become engaged in other conversations with students when this occurred. In kindergarten Raptor was very confident in his hard work and skills, generally displaying a positive mindset that continued through first grade, even during our distance learning models, Raptor's positive outlook towards his art practice was always noted. When compared to the way he spoke of other subjects, art seemed to be a place in which he felt safe and confident in his abilities.

The difference between the previous years and our in-person learning from the summer of 2021 showed a change in Raptor's outlook on his artistic ability in regard to his behaviors in class. Raptor would still often refer to himself as a good artist, however, Raptor regularly also had more extreme reactions to perceived errors in his work since coming back from summer vacation. Similar to Pastel's observed experiences, Raptor was exhibiting signs of 'all or nothing' thinking that had not been seen before in the art classroom by this student. These extreme highs and lows distorted Raptor's ability to work independently when in a negative mindset (Burns, 1980, cited by Neck & Manz, 1992, p. 693). He began changing his descriptions during times of struggle from phrases like 'this is hard', to 'I am bad', and 'I can't make art'. These new phrases

startled me so I began meticulously monitoring and recording some of these behaviors and phrases as they were a very dramatic change from the art student's perspective I previously knew. His struggles in the school environment this year and his dissatisfaction in the art room despite enjoying and valuing the subject were noted.

Raptor only became eligible for this study during this school year by displaying a number of maladaptive and attention-seeking behaviors, such as hiding work, discarding or destroying work he had become dissatisfied with, avoiding work altogether by engaging in conversation to distract himself or other students, roaming the room to be 'helpful' to me by cleaning or assisting other students or by giving them advice instead of completing his own work. When confronted by the teacher he has used continuous streams of negative statements focusing on the words "I can't do it", "it's not right" or "horrible". He had told me at one point someone within his extended family told him he was not a good artist and he wanted to prove he was wrong but 'couldn't' because he was 'right'. I reminded him then as I often remind all of my students that opinions about art are not facts. Good and bad are opinion words, when we should be looking for strengths or ways to strengthen our artwork and challenge our own standards of what is strong art.

### **Presentation of Data: Participant Experiences**

Each participant's use, and buy-in, of the Self-Instruction Technique, was different. After a brief explanation of my coding method, I will be talking about the journey of each student independently to share some of my observations and participant reflections over the course of approximately ten school weeks. At the conclusion of this section, I will briefly talk about some correlations or commonalities seen in student experiences.

### ***Coding of Data***

Data spoken about in these following sections was broken down and coded through open coding methods at first in which I looked for general themes in students' experiences and language use. I also practiced detailed memo writing throughout the coding of all my transcription data, most of which was treated as observational data. I was working to pick out the important discoveries and look for commonalities in student-specific data in which to break down my own long-winded reflections and logs. Looking back to my research question for guidance, I knew I needed to further code my data into more manageable and understandable pieces and that would help me reach an understanding of my research question. Focusing back on that question, I realized I needed to carefully track students' beliefs, and the responses they have to them in order to make any relatable understandings of the data to my initial question. The self-instruction technique, when practiced, created the necessity for participants to narrate their thoughts, plans, and reactions, making them more aware of their thought processes. Knowing students who were practicing SI were thinking carefully about what they were doing as they work, I knew my focus for data coding needed to be on observed student behavior, and student reflections. Picking out evidence from all coded data types, I began specifically looking for changes in students' perceptions and behaviors over time. Student independence in class and in implementing SI became a big indicator of change in students' thinking. I have analyzed this data further to create a narrative understanding of students' experiences.

***Blue Monster's Journey***

Blue Monster, like all the participants, began the study with an interview. In this interview, I learned a little more about my student's specific feelings about art. Blue Monster's interview told me that he had some conflicting views about art and art-making. He reported that he enjoyed creating art and really strived to be 'good' at it. He shared his beliefs that anyone could create art "If they put time into it. If you don't care or try, then you're not going to get really much done." (Blue Monster, personal communication, February 16, 2022). Blue Monster admitted he loved art but doubted his abilities to make it most of the time, citing the reason for this as a lack of perfection. According to Blue Monster, perfection required every mark to land exactly where it was meant to be the first time. He spoke of frustration when things were not perfect and how it made him doubt his abilities. At first, Blue Monster did not name himself as an artist, due to his lack of experience, citing his father as an artist without pause. When asked about the definition of an artist in his words, Blue Monster noted he had contradicted himself as the wording he used could define him as an artist even if he did not think to call himself one.

**Definition of an artist:**

Blue Monster: Someone who loves art, and does it all the time.  
And puts a lot of hard work and effort into it.

Teacher: OK. Why would you say maybe you're not, then?

Blue Monster: Because – oh. I guess I just contradicted myself.

*Figure 20. Blue Monster, Interview I, Defining an Artist, Feb. 16th, 2022.*

**Self-instruction training sessions.** The interview gave me and Blue Monster some awareness of his views on his ability to make art. During our first self-instruction training session, we took some time to think about the language he used that went along

with his beliefs and we pulled out some words that were problematic and could be cueing Blue Monster's brain to doubt himself. Some of these words and phrases included *perfect, bad, annoying*, and surprisingly 'best' as it was being used in a self-deprecating way. Realizing these words and phrases got in the way, a continuous effort was made to create some replacement statements to say before and during the creation of artwork that would help combat negative feelings. A few of Blue Monster's self-statements are listed in *figure 21*; his complete list can be found in *Appendix E*.

Blue Monster	
It will be easy.	
I can do this.	I can do this
I can focus on something certain.	I can focus on something certain
What do I want to draw?	What do I want to draw
I can fix this.	

Figure 21. Blue Monster first set of self-statements.

In the first three sessions of SI training, the teacher-researcher gave the participant an overview of the concept and the theory; that if we become more aware of our language and authentically talk through our decisions using carefully worded instructions, or statements, we will be more likely to feel confident and be able to work through challenges more easily. The teacher-researcher modeled the use of the self-instruction technique for Blue Monster by creating artwork, talking through the decisions I was making, solving errors I created by recognizing what I did and what bothered me and creating a plan to change it before starting the process over again. During the first three

sessions, Blue Monster was a little hesitant to fully commit to the practice, his expressions showing that he felt it was a little uncomfortable. In session one, he admitted he did not even use the technique to help him during his reflection, and the teacher-researcher did need to actively assist the student by asking guiding questions about what Blue Monster was doing as he worked to help him start this descriptive, narrative process himself. By the fourth session, he was on his way to total independence using this technique.

Session four was a significant one for Blue Monster. He hit his first real wall of frustration in this study during this session and had to really utilize the strategy to continue. At the end of the session, during the self-reflection, which can be seen in *figure 22*, Blue Monster explained that self-instruction had been helpful because it helped him not give up when frustrated and led to an artwork he ended up really liking.

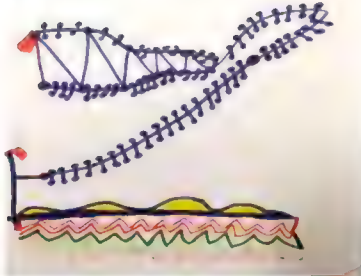
Date/ session	Self-reflection	Notes/Quotes/evidence of change
3/16 #4	<p>Beginning: <b>worried</b> End: <b>Confident</b></p> <p>Prompt: 11</p> <p>Used: pen, paper</p> <p>Did SI Help: <b>yes</b> Help when frustrated.</p>  <p><b>'worry roller coaster'</b></p>	<p><b>During reflection, the student explains how SI helped when frustrated.</b></p> <p><b>Talking about creating self-statements for errors on the spot:</b></p> <p>Blue Monster: Yeah, I could just like do a new one and do it better there or do something else there. Teacher: OK. So it lets you, – having done this process let you think that it was OK to start something new? Blue Monster: Yeah. Teacher: All right. Where maybe you wouldn't have been able to let go of that before. Is that what you mean? Blue Monster: Yeah. Teacher: OK, I just wanted to make sure I understood you correctly. Thanks for that clarification. And I'll see you again next week</p>

Figure 22. Section Example B.M. SI session, student's self-reflection data matrix

After session four, it seemed like the idea clicked for this participant, and he used SI mostly independently for the rest of the study, aloud, in a whisper, and covertly. It was noted around this time as well that a style and material preference strongly emerged for this student which was fully embraced. Permanent markers were less worrisome as Blue Monster started to independently use error reporting scripts when missteps happened, talking through and solving his problem without any of the avoidance or negative self-talk behaviors that were present earlier in this training and before the study began.

Another significant session was session six, which took place on March 30th, 2022. The participant worked through his session per our normal routine at this point; check-in, review, artmaking with self-instruction practice, and then reflection. Blue Monster was observed using self-instruction aloud during almost the entirety of the day's session while creating the artwork you will see in *figure 24*. An example of a successful error script created during the process of creating the work in *figure 24* can be seen below:

Lines. Squiggle. It looks like an octopus's head. Then for this one, this one's going to be more of an elegant one. Oh, I already lined it up wrong. I'll turn it into something. Is that black?.... [continues on in a whisper/covertly and aloud again] Yeah. So now what I'm going to do. I don't know what I'm going to do. So we're going to test things out. I don't even know why I did this like this brown, but it kind of looks kind of neat. Now I'm going to go with a green and probably – first I want to make like a separating line right there. I think that will look actually kind of cool and kind of like – it's kind of like the Y and X-axis, but there's more than just Y and X. [Pause, silence] I like this. Yeah. I'm loving how this is turning out actually. Especially like the drip. (Blue Monster, personal communication, working on "The Slump" March 30th, 2022).




In an error script, you first need to identify your feelings or what you did that caused an error, reassure yourself that you can create a change, begin problem-solving, and then

reevaluate and reassure. *Figure 23* breaks down how this excerpt from session six shows evidence of the student effectively using an error script.

### Blue Monster Error Script Example

“Then for this one, this one’s going to be more of an elegant one. Oh, I already lined it up wrong. I’ll turn it into something. Is that black?.... [continues on in a whisper/covertly and aloud again] Yeah. So now what I’m going to do. I don’t know what I’m going to do. So we’re going to test things out. I don’t even know why I did this like this brown, but it kind of looks kind of neat. Now I’m going to go with a green and probably – first I want to make like a separating line right there. I think that will look actually kind of cool and kind of like – it’s kind of like the Y and X-axis, but there’s more than just Y and X. [Pause, silence] I like this. Yeah. I’m loving how this is turning out actually. Especially like the drip.”

(Blue Monster, March 30th, 2022).

	Identified the error, or part that they do not like.
	Offer reassurance without judgment on ability
	Create and follow through on a plan of action

*Figure 23.* Blue Monster Error script with notations.

In *figure 24*, which shows his completed artwork, and self-reflection from this session, Blue Monster explained he never realized he had spoken at all, beyond a sentence at the beginning of the session. I had overheard him at the end of the session read his reflection question aloud and mentioned he did not ‘really use them’, referring to self-statements, having been observing his continuous use of self-statements and SI I let him know of my own observation of him using the technique and he was genuinely shocked. The process, which he admitted felt a little silly and unnecessary in the first two sessions, had become normal and an independent process on which he did not seem to feel the need to think too heavily about to employ.



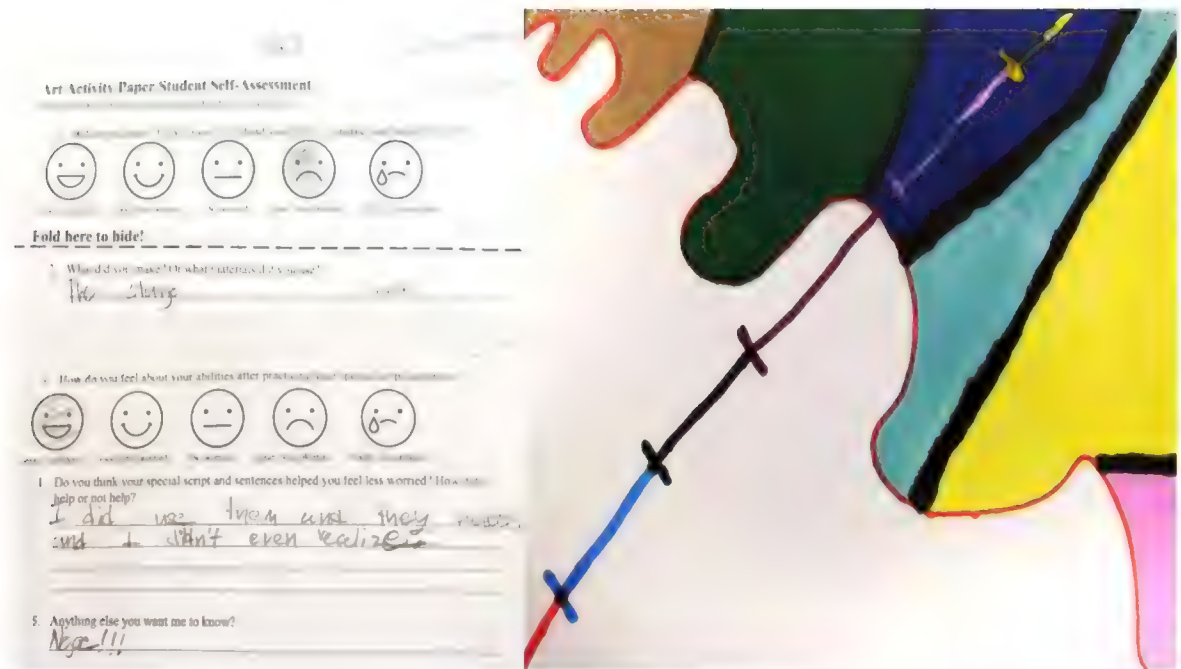


Figure 24. Blue Monster Self-Reflections (left) and 'The Slump' (right), session #6, March 30th, 2022.

During his remaining sessions, Blue Monster would report that he had used the technique more in his head and that it was helpful for focusing. Upon the conclusion of session eight, which Blue Monster reported enjoying a great deal, he requested an additional training session, and I allowed him a ninth session as he had not missed any sessions and I had a little bit of flexible time left. I am glad that I did as session nine was one of Blue Monster's most interesting moments in the study.



Figure 25. Session 9 artwork Blue Monster April, 25th, 2022.

Blue Monster started strong and independently used SI to begin the work pictured above in *figure 25*, which was inspired by the work made the previous week and pictured in *figure 14* halfway through however he stopped and just looked at it, and honestly said he did not like it. He was not sure what it was that he did not like so an error statement was hard to create. I was honestly a little worried that he would slide back into using negative self-talk about how he had caused it to be bad, however, that was not the case with a small prompt from me asking what he thought he could do, Blue Monster decided to just continue it anyway, with a little less care, playing around and drawing over things, experimenting with it until he finished the project anyway. Again, in the end, he still did not really enjoy this artwork.

As much as I wish he had liked this artwork, it was beneficial for me to see him react to something he clearly did not think was ‘good’ after experiencing success during previous sessions. With a reminder that the self-reflection scale is related to your feelings about your ability to make artwork, and not on how much you like the artwork you made, Blue Monster and I were able to think about what happened and had the following conversation:

**Teacher:** OK, we can write that. We did notice today, which is an interesting note, that you didn’t like how it turned out, but did you feel OK about not liking how it turned out?

**Blue Monster:** Yes.

**Teacher:** Yes, so you felt OK about it not being something you liked?

**Blue Monster:** Yes.

**Teacher:** That’s good; do you think you would have felt that way before?

**Blue Monster:** [quickly answered] No.

**Teacher:** Right, so that’s a change right?

**Blue Monster:** Yes.

**Teacher:** That’s good right? It’s a positive change. That’s great. I’m glad that you felt okay with it not being exactly what you wanted, that’s a wonderful thing. Anything else that you noticed or wanted to say about this or just anything? [Student writes nope on the self-reflection form, Teacher laughs] Nope? All right, just double-checking, because you have the right to talk about your own experience I don’t want to make things up, just trying to make sure I understand what you’re thinking so I don’t record it wrong.

**Blue Monster:** I think I got a little mad when I didn’t do like I liked, so I just started drawing everywhere to see if it helped.

**Teacher:** Yes, I saw you were trying out some new things and you’re experimenting. That’s okay. You’re allowed to be a little mad; I get mad at my work all the time. That’s all right. As long as you don’t get to be –

**Blue Monster:** Ripping up art.

**Teacher:** – where someone is thinking that you no longer can do something when you can. It’s to get out of your this whole thing which I’m hoping this will help with in the end is that it will keep you from feeling like you weren’t able to just because you don’t like something. You know.

**Blue Monster:** Yes, it’s kind of in a good way that I didn’t draw something I liked.

(Blue Monster, personal communication, conversation about mistakes between Researcher and Blue Monster, April 25th, 2022).

This conversation was had in a casual manner, and the student stayed visibly calm

throughout the session while actively trying to create and edit his work. As seen in the earlier conversation, Blue Monster did still have negative feelings and even became ‘mad’ at one point while creating. However this ‘mad’ feeling did not lead to maladaptive behavior, Blue Monster appeared to stay in control of his thoughts, did not use negative self-talk, and continued to work through frustration without starting over, discarding, or damaging work.

Blue Monsters' reported reflections during individual SI training sessions showed similar or increased feelings of confidence in his abilities from the beginning of a session when the SI technique was utilized. These results can be seen in *figure 26* below, which tracks students' feelings of confidence before and after creating a work of art while using the self-instruction technique. After the first session, his reflections often noted that SI training had been helpful in letting him focus and reassure himself. He also noted that using SI felt strange sometimes, but helped him to think about what he could do and reminded him not to give up, creating less worry.

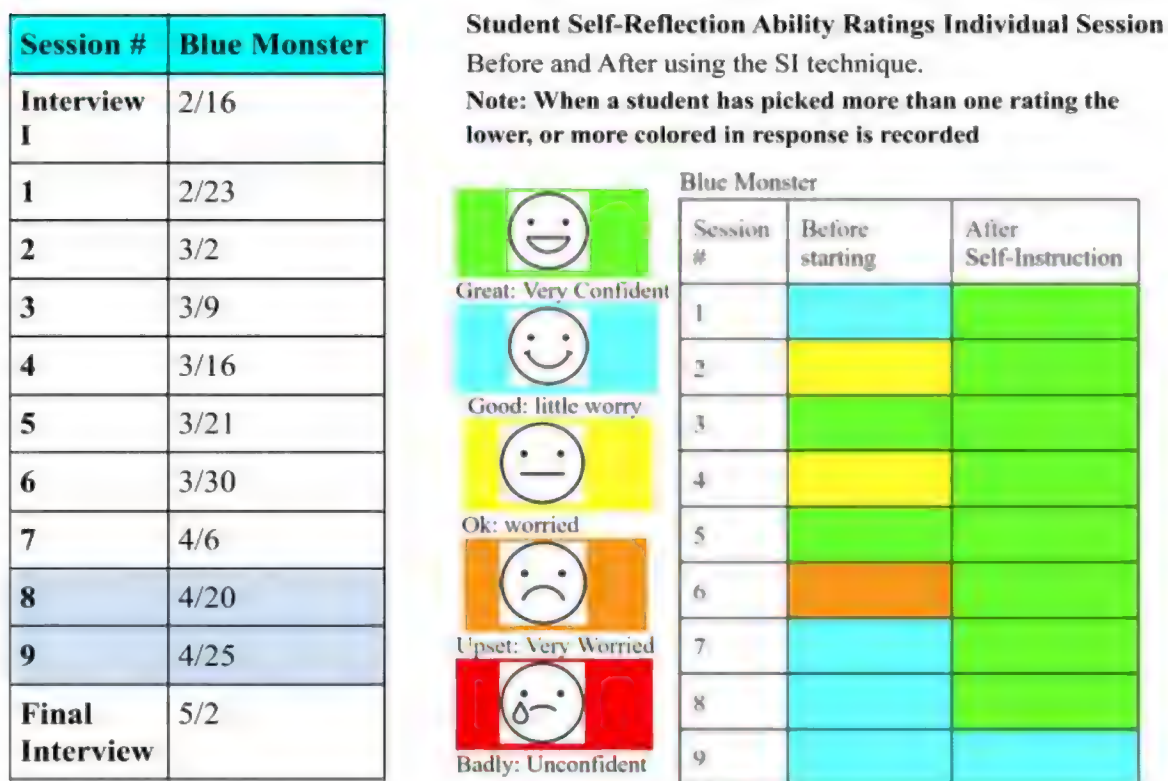


Figure 26. Blue Monster SI self-Assessment results before and after sessions.

**Blue Monster, In-class.** In-class data was taken over the course of seven classes, one of which was taken before SI training began. Student exit tickets were given after each session after SI training began with the exception of one class in which the researcher forgot to ask the students to fill it out. The first observation occurred on February 18th, as we were working on a self-portrait project that has become a tradition of the 5th-grade students. Students were drawing on ceramic tiles and began to add glaze during class. This class took place before Blue Monster began learning SI as a coping strategy. He exhibited maladaptive behavior that was historically typical for him before the study began. The student avoided working until I approached him, and as I attempted to ask him what he was working on, and guide him in the right direction, negative self-talk patterns emerged. This student did not show signs of independence and needed consistent proximity and reassurance from the teacher to work. Any time the teacher left,



Blue Monster avoided working until they returned again to check-in. Progress was very slow that day.

During the next class period, Blue Monster was expected to continue glazing his portrait. The class started out in a similar fashion to the last where he avoided working at first until I checked in with him. One SI training had taken place at this point and Blue Monster did not fully seem convinced by this process yet; he was reminded to try utilizing it today. I needed to check in with him once more during the class but after two reminders Blue Monster was able to work independently for the rest of class. I still needed to remain in close proximity to this student to ensure he continued to work, but the amount of time I needed to stay close to him for him to work decreased during this class. I forgot to give him an exit ticket during this class, but I did note a little more independence during this class session.


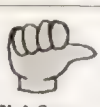

The next three in-class sessions followed one to three more SI training sessions in which Blue Monster was beginning to show more independence using SI. In-class exit tickets, however, say that this student did not use SI during class because he reported he was not worried. This contradicted some of the teacher-researchers observations, as I did have to remind the student once during two of the three sessions to utilize SI when stuck at the beginning of class. In the third class, the student was observed as being independent throughout the entire class period. These three sessions showed a big shift for the teacher as I spent much less time reasoning with the student during these sessions and was able to check in with his table group without needing to stay for extended periods of time once I saw all students were on track. During the last two observations taken in class during the study, this student reported using SI as they worked. One report

said that he was unsure if it had helped, and on the final observation day, Blue Monster reported that SI was helpful in class that day. An example of a completed exit ticket by Blue Monster can be seen in *figure 27*. More detailed coded data for Blue Monster can be seen in *Appendix E*.

End of Art Class Exit Ticket


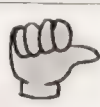

Code Name: Blue Monster Date: 4-19-22

1. I made or worked on an artwork today:



Yes      Not Sure      No

2. I felt worried or unsure today when I was making art.




Yes      A little bit      No

3. I thought about, said, or read the sentences I made to help me if things got hard.

Yes      No

4. If you used your sentences, did they help?

Yes      Not Sure      No

Anything else you want me to know?

None

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For Teacher information:

Did the student have help completing this form?

Yes ☐ No ☐

Helped by:

Reading: ☐ Transcribing: ☐ other: \_\_\_\_\_

Initials of helper: \_\_\_\_\_

Figure 27. Example of an exit ticket by Blue Monster from April 19th, 2022

Blue Monster did not elaborate either day as to why he felt it was helpful or not. In both of these remaining class observations, Blue Monster showed signs of increased

independence in class, only asking clarifying questions, and did not use negative self-talk out loud in class. He also began to problem-solve more independently and worked with others in his table group when he needed suggestions. No avoidance behaviors were observed during either of these sessions, overheard conversions were calm and the student was more casual in talking about what parts he liked in his work and what parts he wanted to change. The researcher had not heard this type of talk from this student in the past without the insertion of negative self-talk. A summary of data exclusively from student exit tickets is detailed in *figure 28*. This data suggested that the student only used SI in class on two occasions throughout the study, but as covered, the teacher-researcher did remind the student in two out of the five sessions to utilize the SI technique, so SI may have been used but not noticed by the participant.

### Student Reflection: In-Class self-report



\* Blank = no answer N/A if SI was not used

Questions asked:

1. I made an artwork today:
2. I felt worried or unsure today when I was making art.
3. I thought about, said, or read the sentences I made to help me if things got hard?
4. If you used your sentences, did they help?

Blue Monster	#1	#2	#3	#4
3/9/22	Yes	No	No	N/A
3/17/22	Yes	No	No	N/A
4/4/22	No	No	No	N/A
4/19/22	Yes	No	Yes	Not Sure
4/27/22	Yes	Not Sure	Yes	Yes

Figure 28. Blue Monster In-class Exit Ticket Summary

A final interview was given on May 2nd, 2022. During the interview, Blue Monster was asked to reflect on his experiences throughout the study. For more information on the interview protocol, see *Appendix B*. In his first interview Blue Monster stated he believed art was for everyone, when asked the same question again he



noted the same belief, citing that ‘if you just try’ or work for something, you will be able to succeed in the end. Talking more specifically about his own art as of late, Blue Monster began by bringing up the work he made during the last session, pictured in *figure 25*. This artwork he did not like and still did not like, he recalled being frustrated by this piece in the end, but how he did not give up on it. He also looked back at old artworks he really liked in February and reflected on his change of style and how he felt he had grown since making those artworks.

**Blue Monster:** I don’t really like [it] anymore, because it’s like – just like not – I could do better.

**Teacher:** OK that’s OK. You’re allowed to change your mind on artwork.

**Blue Monster:** I liked in the beginning because I wasn’t as – because I’ve gotten better at it I feel like. ( Blue Monster, personal communication, reflecting on previously made artwork, May 2nd, 2022.)

After talking about artmaking and current feelings surrounding artmaking, the interview focused on self-talk and the use of the self-instruction technique, or SI, in and out of class. When asked about the importance of language used to describe yourself and what you do, Blue Monster responded that language was important to think about and could affect what you do. He reasoned that if you talk to or about yourself negatively you can make yourself feel sad and that makes things harder to accomplish. The process of writing general self-statements was reported as ‘easy’ by this student because it only required you to write nice things about yourself. He reflected that it was a nice way to start out in a positive thought process but was harder to use when frustrated. With teacher support, however, the researcher did notice the student using SI independently over time. When brought up in the interview the student remarked that he “... never really noticed. Not until you pointed out when I did... Yes, probably was [helpful]. I didn’t stop [making my art] so” (Blue Monster, personal communication, May 2nd, 2022).

During this discussion, Blue Monster noted that though he had been using the technique in our small sessions, more than in class, he had started using some of these ideas in basketball practice and thought the technique could be used in other areas where someone feels frustrated in any way, and he plans to use it when he feels frustrated in the future. One of the last questions in the interview asked students if they noticed any changes in feeling about their abilities, or changes in their ability to start making artworks. Blue monster responded: “Yes, I’m just thinking about what I’m doing and then I’m showing – I’m actually doing what I want to do instead of messing it up” (Personal Communication, Blue Monster, May 2nd, 2022). Upon further questioning for clarification, it was uncovered that Blue Monster noticed he was being more thoughtful while creating, which gave him the ability to feel more confident from the start and less worried or focused on messing up his work. Blue Monster created the artwork seen in *figure 29*, during our final interview.



Figure 29. Blue Monster's drawing during Final Interview

Blue Monster's journey utilizing the SI technique influenced his own development of style and personal interests. As can be seen in the timeline in *figure 30*, Blue Monster's observed or reported use of negative self-talk, or other maladaptive behaviors decreased over time. Though worry seemed to never completely go away, the use of SI as a coping

technique became more independently utilized, and positive changes in feelings were noted more often during the end of the study. Independence in student problem solving behaviors increased compared to the beginning of the study when the student showed more dependency on the teacher to solve logistical and creative problems while working on artmaking.

### Blue Monster's Timeline

C- In-class data

SI - Individual Session

2/18	2/23	3/1	3/2	3/9	3/9	3/16	3/17	3/21	3/30	4/4	4/6	4/19	4/20	4/25	4/27
C	SI 1	C	SI 2	C	SI 3	SI 4	C	SI 5	SI 6	C	SI 7	C	SI 8	SI 9	C

### Timeline Key

Observed or Reported instances of:

Negative Self-talk	Other Maladaptive behavior	Reported worry	Independent problem solving and reassurance	Dependence on teacher to reassure and support problem solving	Positive report of change after SI use/ SI was helpful	SI used with help	SI used independently
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Figure 30. Blue Monster's Timeline

### Triangle's Journey

During our initial interview Triangle shared his love for sports, video games, and sometimes art-making. He reflected quite a bit on his feelings and capabilities to make art, stipulating that he only really likes art when he is 'good at it' and that he was unsure if he was a good artist. "You know, like sometimes I might feel like I have bad art. It sometimes frustrates me. Like when [redacted- name] was here, I didn't think my art was good" (Triangle, personal communication, February 16th, 2022). Noting that his feelings have changed over time, reflecting on artwork made recently, Triangle gave the following

comments, “I don’t think it’s top tier. I don’t think it’s terrible, though” (Triangle, personal communication, February 16th, 2022). Phrases like, ‘not the best’, ‘not too terrible’, ‘not great’, and ‘bad job’ were riddled throughout our interview when the student spoke about his abilities in making art, but also in the process of learning new things. He cited that practice is something he knows will help him ‘be good’ at things, but can be hard to do; he noted in the past that he would sometimes give up because it was easier.

Triangle mentioned that for a while he gave up on soccer but was glad he started to try again in the future. He also mentioned giving up on art when he was in kindergarten but decided to try again in first grade. When asked if he saw himself as an artist Triangle was quick to say that he did not think of himself as an artist, he would like to someday be able to say he was. I also asked Triangle what he usually did when things become challenging or worry sets in, during art-making or any other situation. Triangle reflected that he usually did one of two things; if possible and he felt comfortable enough to do so, he would talk to his parents, or alternatively, he would avoid the thing or situation he had trouble with and wait for it to change. He also reflected on negative feelings that surfaced during these times that he attempted to escape from by waiting or avoiding the problem.

**Triangle:** Or I just do nothing about it and wait for that to go away.

**Teacher:** OK. So sometimes you just wait.

**Triangle:** Yeah.

**Teacher:** You just wait it out. OK. Do you do that sometimes in school?

**Triangle:** Sometimes. Like almost every single day, I get this random feeling that I feel like really sad. Like I don’t feel sad, but I get this random feeling. Like it’s not good. What I do is not [good]. So I stop [trying].

(Triangle, personal communication February, 16th, 2022.)

I did not have Triangle elaborate on his reported feelings any more than he decided to describe, but I did remind him that there are support systems in our school that could help him with these feelings of sadness and that I could help him set up these supports if he ever needed me to.

This interview was very thoughtful on Triangle's part, he has struggled to explain his thought process in words but this interview really brought out some of his beliefs in his capabilities, and confidence levels, though Triangle never outright said anything extremely negative about himself, his words and phrasing choices were consistently self-deprecating and often devalued his successes. This was seen throughout our talk, when explaining how he was the star player on a team, the report was immediately followed with the explanation that this was only because the other players never practiced. He followed up this statement again by admitting that their league was at the lowest level so his success in this team was not really a success. Information from this interview was used to help me plan for our first self-instruction training session.

**Triangles Self-instruction Training Sessions.** Triangle had his first SI training session on March 2nd, 2022, this session began with a thorough description of how our time would work during these individual sessions, and the process and theory behind using self-instruction training as a tool for problem-solving and developing confidence following the individual sessions protocol covered earlier in the chapter. After explaining the process and modeling how it can be used, Triangle generated some general self-statements. These self-statements were created by thinking closely about Triangle's natural way of speaking about himself and his abilities. Before we could begin, Triangle needed to identify his feelings about his capabilities and identify words and phrasing that

held him back. For this student in particular it was important for him to notice how he had devalued his accomplishments through his word choice, and how his reports of what happened or what he worked on were at times self-deprecating. Our interview from the previous week helped show evidence of this and I helped Triangle to notice these trends in his thinking patterns when talking about himself compared to others. *Figure 31* shows some of the beginning self-statements Triangle generated for himself on this first day of training; for a complete list of Triangle's written self-statements please see *Appendix F*.

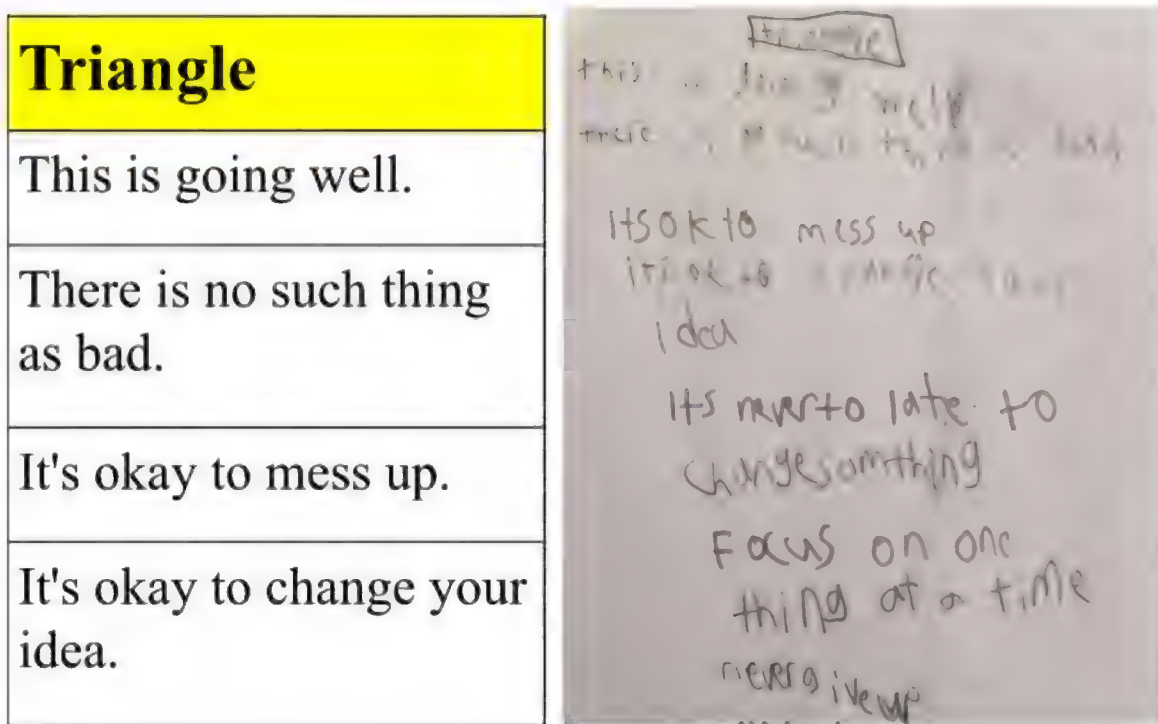


Figure 31. Triangle's first set of self-statements

After creating a few of these statements and attempting to steer the student away from phrasing like 'It's not going to be too bad', and reminding himself instead that 'It's ok to mess up,' Triangle began his own artwork practicing the use of SI as he worked. The piece he created during session one is pictured in *figure 32* along with his confidence rating scales before and after using SI which was included as part of his self-assessment. Unlike some of my other participants in the study, Triangle did not need to be convinced



to try out this technique. After my explanation of how it worked, and even how it may feel silly to start out, Triangle readily attempted the technique. After starting with his first self-statement he began using my example and the visual from *figure 14*, showing how SI works, to begin talking through his decision making aloud. The process of it seemed to make a lot of sense to him and he was rather successful independently navigating through this process of thinking out loud and reaffirming his decisions until he created an error. I also observed how carefully Triangle was trying to avoid using some of the phrasing we talked about at the beginning of the session that belittled his work. He was not successful at removing the phrase ‘that’s not so bad’ during this session or in sessions to come.

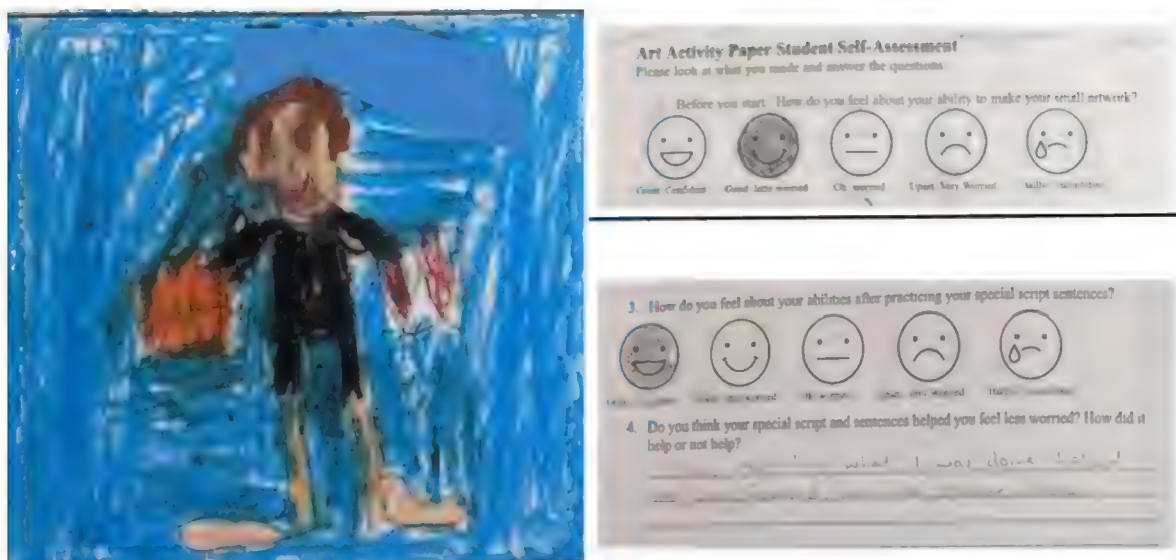


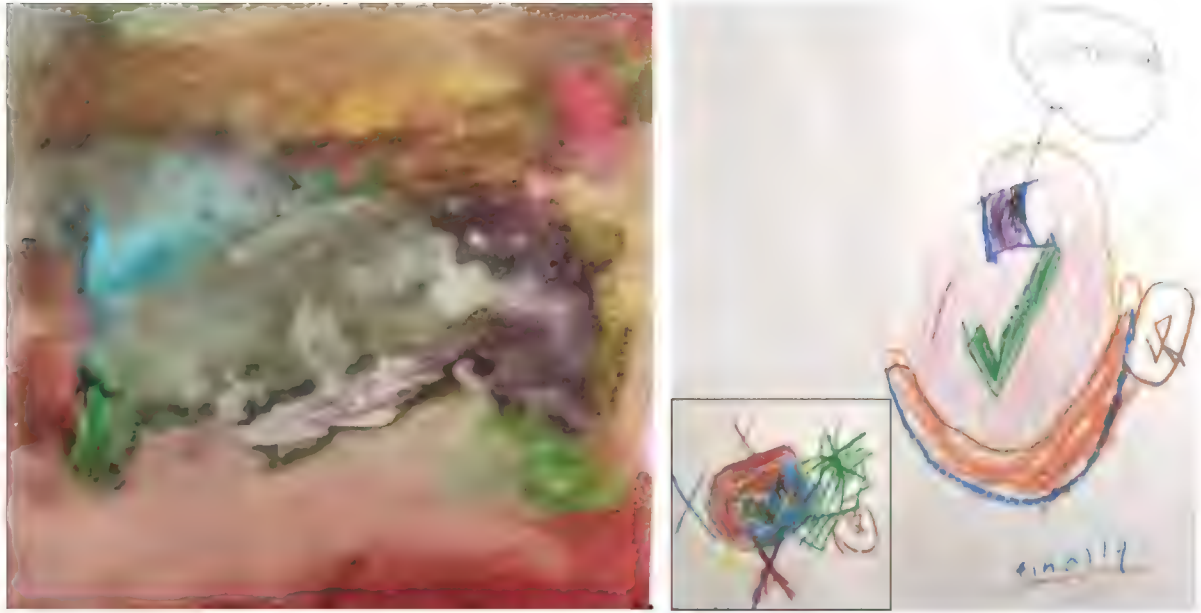
Figure 32. Triangle SI Session 1, Prompt 5. Completed work (left) Self-assessment before (top right) and after creating an artwork (bottom right).

Triangle did need assistance with creating error statements during our first session and received guidance in the form of guiding questions to help him through his problem solving. He was not able to independently problem solve during this session, but showed determination and actively participated the entirety of the session to attempt this strategy independently, asking for reassurance from me as his teacher to see if he was doing things



correctly and to validate the work he was creating. He asked for my opinion on colors if things were recognizable, and his overall success level, most of these questions I deflected back at Triangle stating that his thoughts are important as well. At the end of the session, Triangle reported that he had liked using this technique today because it helped him stay focused and made his artwork feel more complete.

The next two self-instruction training sessions had a similar flow. Triangle picked up the process of using SI quickly and added to his general self-statements before beginning his work during each session. Review and modeling done by the teacher was minimal and focused more on creating error scripts than on the reason for using or the narrative process of using SI. Triangle made some more experimental drawings during these sessions, picking materials he did not often use, watercolor paint, and crayon, to create his works pictured in *figure 33*. Observations showed he used SI as a means to help decide what he should do next, and came to the realization that repetitive mark-making helped him concentrate. Using SI kept him in a constant state of making and responding, and by the end of his third session Triangle was using error statements with less assistance and guiding questions.



*Figure 33.* Triangle's work from SI sessions 2, mark-making exploration (left), and 3, abstract characters of worry, and a supportive friend (right).




By the time we reached the fourth SI session Triangle was using SI and error scripting independently and was beginning to use SI more covertly in his head. The student still showed subtle signs of doubt but his language did not reflect negative phrasing or avoidance behaviors that were typical of this student before the study. By the sixth session, I realized the student was asking me for less reassurance that he was doing well and was supplying this reassurance for himself on a consistent basis. When asked if SI felt helpful Triangle consistently agreed during our independent sessions, but always struggled to explain why, I tried to help him explain his thinking by asking targeted questions based on my observations and feelings he may have experienced, and I learned that Triangle thought SI was useful in creating focus and planning, which was comforting for him in some ways. In session three I captured the following quote. "Because like saying what I'm going to draw makes – kind of makes me draw better. Helps make the drawing better because I'm saying what I'm doing." (Triangle, personal communication

March 16th, 2022). This independent use of SI and openness to experimentation continued throughout the rest of our sessions, though the imagery itself began to move back to more recognizable figures by session seven.

Our last individual SI training of the study was held on May 4th, 2022, and marked Triangle's eighth practice session. This last session, like Blue Monster's session, was made notable by Triangle making an artwork he did not immediately like. Having requested a free choice prompt today, Triangle decided to recreate a version of the 76'ers logo. His first attempt can be seen in *figure 35*. Triangle did a great job first working through and problem-solving as he drew, continuing to reassure himself and make error scripts to try and finish the piece and not give up even as he became more frustrated. *Figure 34* below shows a portion of Triangle's scripted self-talk as he worked.

### Triangle Error Script Example

"Not the best circle but it'll work. So then I'm going to start off by drawing these lines right here, like the outside lines to be it look like a basketball. And then, yeah. So I did that. Now I'm going to draw the rest of them. So I'm going to draw this line right here. Then right here, I guess. No, I have to do it under it. Dang it. I already messed up... I'm going to see if I'm able to make this into an S so it could be like right there. And then I'll draw the line again. Ok that works so far." (Triangle May 4th, 2022)

	Identified the error, or part that they do not like.
	Offer reassurance without judgement on ability
	Create and follow through on a plan of action

*Figure 34.* Triangle, Error Script Example.



Figure 35. Triangle session 8, First attempt at 76er's Logo.

Triangle completed his piece after utilizing SI to help him finish, and as he finished we had the following conversation.

**Interaction with Triangle, May, 4th, 2022 during SI training:**

**Teacher :** So how are you feeling?

**Triangle:** OK. If I'm being really honest, I'm doing this right now because I know this isn't what – I know bad can't be a word its not good to say I'm bad. But I don't really like it.

**Teacher :** And that's OK. You don't have to like your artwork all the time.

**Triangle:** Yeah, I don't like it.

**Teacher :** But I noticed that you were persevering through it anyway. You didn't give up on it and you didn't avoid trying – continuing to try.

**Triangle:** I didn't give up but I think I want to stop this one – is it OK if I restart?

**Teacher :** Yeah. Because you know what? You finished that work and you can totally do another version now that you've checked it out. That sort of ends up being your pre-drawing, right?

**Triangle:** Mm-hmm.

**Teacher :** You figured it out. You didn't get upset with it. You didn't avoid your work and that's wonderful. You used your self-statements. Those are all things that I noticed. You kept persevering or working through it, that was wonderful.

**Triangle:** Thank you. (Triangle, personal communication about his work, May 4th, 2022).

Triangle started another drawing of the same subject and was able to create a more detailed and recognizable drawing after having spent the time and effort trying to problem solve and correct errors in the first drawing. You can see his completed drawing in *figure 36*. During our reflection Triangle said that using SI to finish the first artwork had been important because it helped him plan out and realize what he needed to do in the second drawing. When I asked if he thought he would have finished the first artwork before moving on before the study, he said no. He also said that he would have probably given up at the beginning as well. During this reflection, Triangle showed a lot of pride in his work and remarked that this drawing was the best drawing he had made of this logo in a very long time.





Figure 36. Triangle session 8, Second attempt at 76er's Logo.

Triangle quickly embraced this idea of changing language, and talking through decision-making activities, and reported a positive change in his feelings about being able to create artworks during the majority of individual training sessions with the exception of one session where he started out feeling completely confident and stayed confident in the end. *Figure 37* summarizes Triangle's SI training self-reflections about his ability to create works of art, before and after creating them with the help of SI. More detailed data collected on this participant can be found in *Appendix F*.

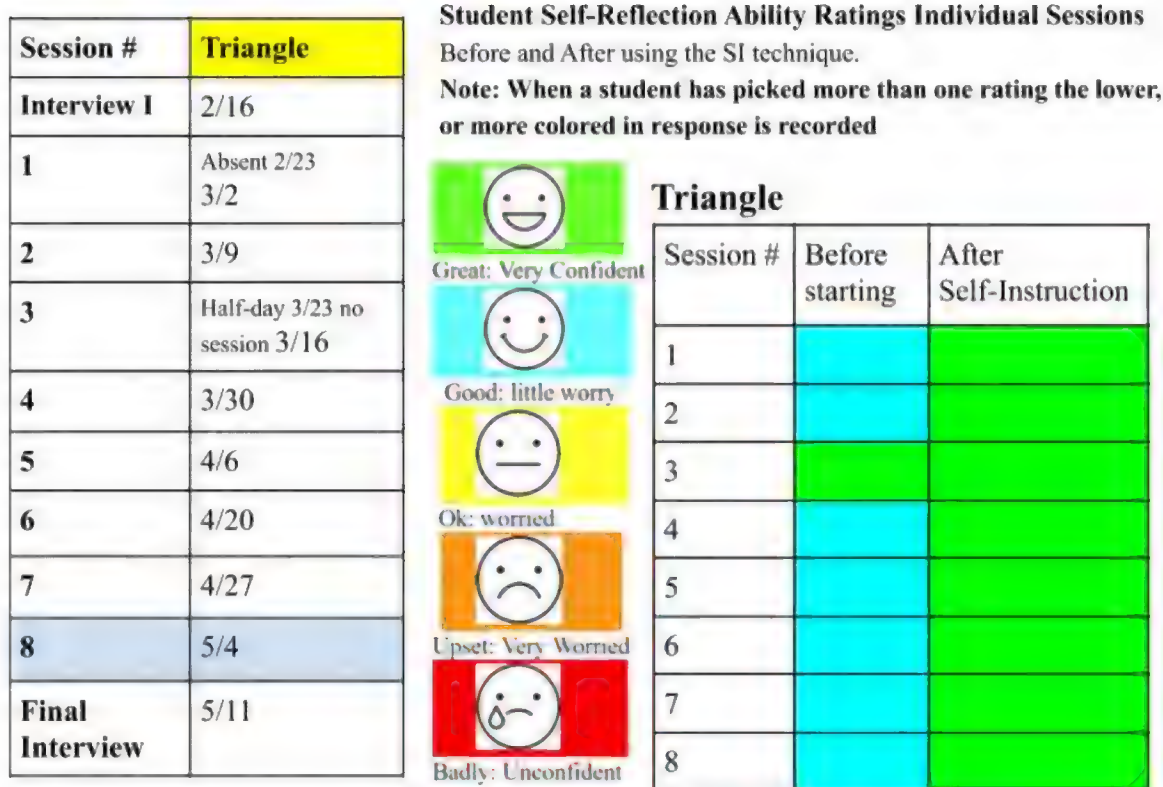


Figure 37. Triangle's SI Self-assessment results before and after sessions

**Triangle using SI In-class.** According to the self-reports Triangle gave at the end of each in-person class, he utilized SI during every class period during the study, reporting three out of seven times that SI had been helpful to overcome challenges, and in the remaining four he reported being unsure if this technique helped out. When further questioned, Triangle often explained that he had a hard time saying why SI was beneficial but remarked that it was helpful, which was consistent with his experience in class, *figure 38*, shows a summary of Triangle's exit ticket response taken at the end of each class.

**Student Reflection: In-Class self-report**

\* Blank = no answer      N/A if SI not used

Questions asked:

1. I made an artwork today:
2. I felt worried or unsure today when I was making art.
3. I thought about, said, or read the sentences I made to help me if things got hard?
4. If you used your sentences, did they help?

**Triangle**

Date	#1	#2	#3	#4
3/3/22				
3/11/22				
3/21/22				
3/29/22				
4/6/22				
4/21/22				
5/9/22				

Figure 38. Blue Monster In-class Exit Ticket Summary.

Similar to what was observed in our individual sessions, Triangle was quick to utilize SI training in class, and only exhibited negative self-talk and maladaptive behaviors in class on the first day of class after receiving his first training session. We were working on a project involving glaze which had been a source of confusion and worry for many students as we have not used ceramics in the past two years due to the lack of access caused by the COVID-19 pandemic, and many students forgot how this material changes, including Triangle. During this session, Triangle became very worried about ruining his work and attempted to start over from the beginning by taking his glaze off with a sponge. Luckily I caught him before he eased all of his work, Triangle needed to be reminded of the science behind glaze, as well as a reminder to use SI as he worked. He admitted that clearing his whole tile would have been a drastic move that he did not need to take. Curiously, despite observation data and the need for intervention, Triangle did not report being worried during art-making during that first class but did remark that



self-instruction was helpful. The remaining six class sessions showed Triangle as gaining independence in class; his use of self-deprecating language decreased frequently from the first day of SI training when I attempted to help the student become more aware of it. By the end of the study, this language was absent from my observations altogether. By the end of March 2022, Triangle was observed as being more self-sufficient and needed less teacher help to begin working. No avoidance behaviors were observed after this date, which showed a significant change as avoiding, and waiting had been a major maladaptive behavior set that Triangle regularly employed before SI training began. March 21st, 2022 in particular was significant, as students began to learn more about paper cutting techniques and started practicing themselves. This had been a class I had worried about as being potentially difficult for this student as he struggled with fine motor activities and would at times need accommodations that he was resistant to use. I worried that this class may cause a bump in his new trend of confidence and self-motivating behavior. I was very happy to have been wrong however as I observed Triangle persevere and effectively use SI during this class and following classes when struggling with these fine motor activities.

A final interview was given on May 11th, 2022. This interview focused on students' feelings about making art and using self-instruction. One of the first questions asked was about students' current feelings about art and their ability to make it. Triangle responded, saying he felt: "Really good about it. Like I went from not very good to good... these classes have really helped me. When I've done them I've improved at art" (Triangle, personal communication, May 11th, 2022). When asked about self-instruction training emphasis on thinking and word use, Triangle agreed that words are powerful and

affect our ability to try, or try again when needed. Reflecting on this idea he said: “Yeah, it’s hard to explain... what you tell yourself makes you feel good or bad. I can practice and try things I can do [a] bad job, that doesn’t mean I’m bad” (Triangle, personal communication, May 11th, 2022). Triangle liked using the descriptive language and narrative process of SI, reporting more confidence from practicing this technique. When asked to elaborate on his feelings of confidence development, he said he felt the process allowed him to stay focused on a plan of action and to better understand ‘how things are working’ referring to material qualities. Using SI, according to Triangle, helped him feel like he was able to create; the exact phrasing he used was ‘more able’ in which to describe this feeling. He was ‘more able’ to get started, think positively, keep going, and complete artwork. As an example of one of the things he felt he was ‘more able’ to do, Triangle referenced the drawing inspired by the Lakers basketball team he was working on as we completed our interview, making the following remark: “ I never thought I could do this before... I wouldn't have even tried to” (Triangle, personal communication, May 11th, 2022). This artwork can be seen in *figure 39*. Triangle also noted that he could use this technique to help with other things if he changed the wording a little and that he was glad to have tried this out because it has given him enough confidence to make artwork at home, which he did not do in the past. He said that knowing he had his sentences to help him at home made him excited to make more art when I, as his teacher, could not help him.

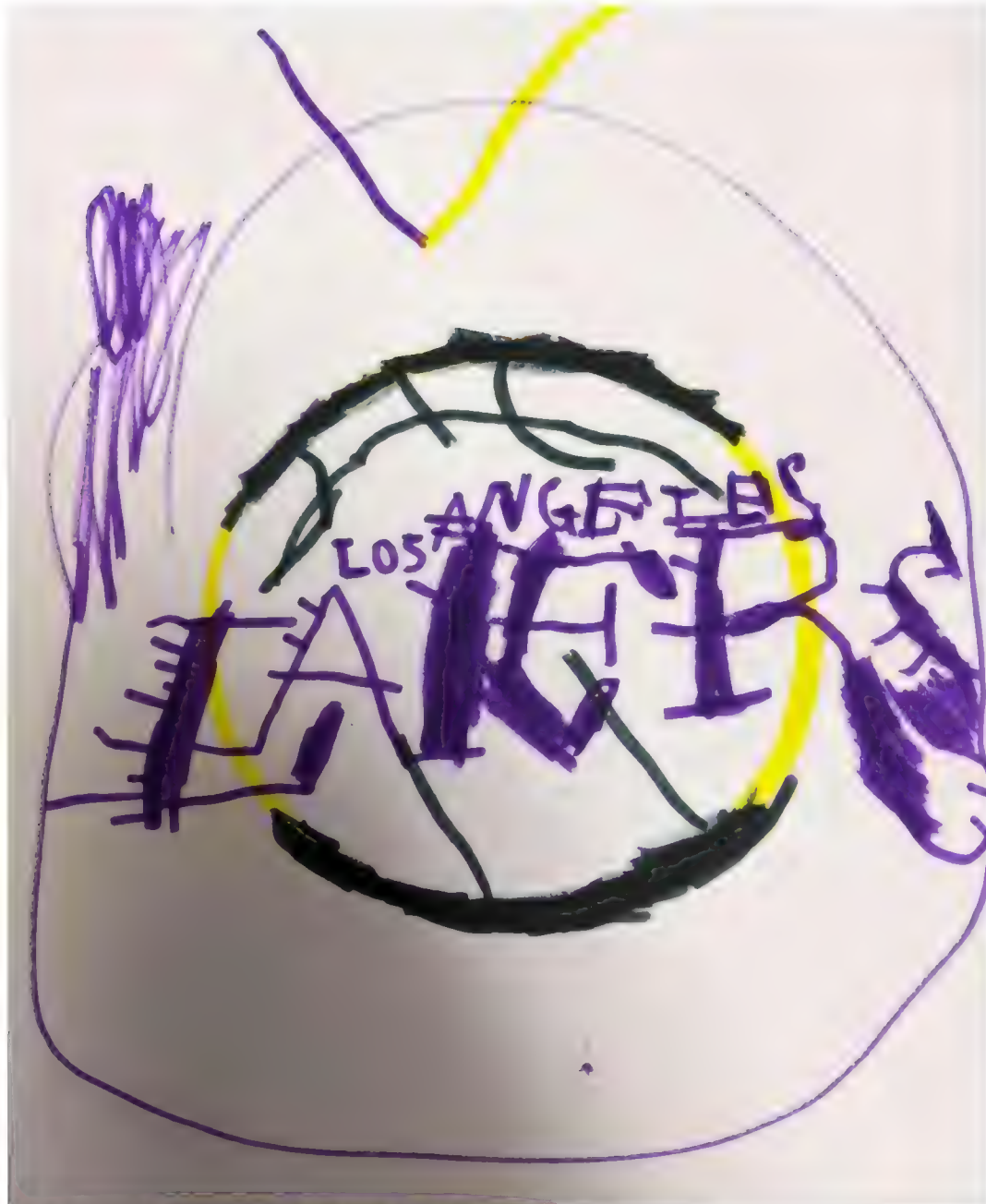


Figure 39. Triangle's artwork 'The Lakers Logo' made during the final interview, May, 11th, 2022

Triangle really embraced the ideas learned in this study, and his final interview gave a lot of insight into the value he placed on this process of thinking. The emphasis on careful thinking about language was carefully considered by this student, as I listened to him change his word choice and carefully avoid judging himself. In Session four of our individual training Triangle was so attentive to negative language he decided to start our

session by changing the self-talk and expressions of the ability rating scale at the beginning of the activity sheet pictured in *figure 40* stating he was concerned for their pretend wellbeing. This process also brought out more positive moments and jokes from this student that did not involve self-deprecating word choices or de-validation of his work. The following quote shows one of these such jokes:

**A positive statement about ability when looking back at old artwork:**

**Triangle:** Wow, whoever did that's a good drawer. I wonder who did that. [talking about his own previous work from class, with a smile]

**Teacher:** I know. They are a really good artist, aren't they?

**Triangle:** Yeah.

**Teacher:** I agree.

(Triangle, personal communication, April 27th, 2022).

This joke was simple but it showed that Triangle was reflecting on the work he had created without belittling the work he did to create it, which was something I had never observed or experienced from this student in the past. Success for this student often used the words 'it's ok' or 'pretty good' and most often followed with the phrase 'I guess'. Self-instruction was heavily used and embraced by the student, and the trends in his data timeline in *figure 41* shows some of the changes noted and reported over the course of the study.

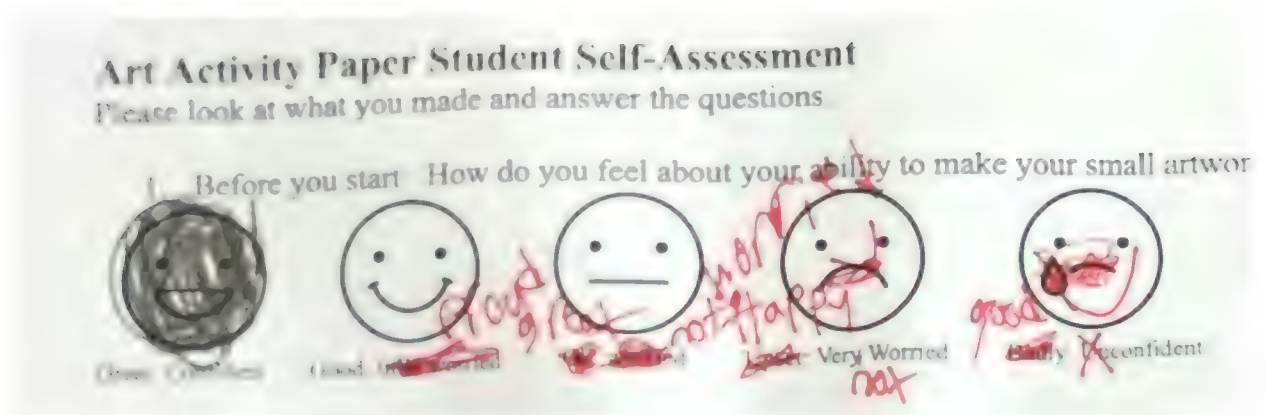


Figure 40. Triangles edited version of the ability rating scale, March 30th, 2022

**Triangle's Timeline**

C- In-class data

SI - Individual Session

3/2	3/3	3/9	3/11	3/16	3/21	3/29	3/30	4/6	4/6	4/20	4/21	4/27	5/4	5/9
SI 1	C	SI 2	C	SI 3	C	C	SI 4	C	SI 5	SI 6	C	SI 7	SI 8	C

**Timeline Key**

Observed or Reported instances of:

Negative Self-talk	Other Maladaptive behavior	Reported worry	Independent problem solving and reassurance	Dependence on teacher to reassure and support problem solving	Positive report of change after SI use/ SI was helpful	SI used with help	SI used independently
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Figure 41. Triangle's Timeline Data

***Pastel's Journey.***

Pastel was eager to begin our SI training since I first asked her about her possible interest in being involved in a study focusing on independence and developing confidence in artmaking. This was back in November of 2021 when I was still trying to figure out how to implement a language-based strategy in a visual arts classroom and identify possible participants. Pastel latched on to the idea of extra art, and confidence training and was ready to begin what she referred to as 'secret art club time' way before we were ready to actually begin or I could seek official permissions. This eagerness to try stayed with Pastel throughout the study, even when she admitted to thinking this whole

idea was very ‘weird’. In our initial interview, I learned even more about Pastel’s passions for the arts of all kinds and realized quickly how thoroughly she could explain her ideas when talking about subjects she thought were important. In this interview, I found out that Pastel loved all of the arts, visual, and performance-based, and practices all of them. She reflected on the arts in general as being a medium in which you can share part of your soul, or experience joy, emotion, and understanding of others. Pastel also expressed that she loved making art, but that she struggled a lot with it. Pastel reflected on her feelings while making art and said:

But sometimes, the reason why I don’t really feel like I’m good at art is because I have this thing in my brain where English won’t come... [mumbled some phrases in Russian] I have this thing in my brain where I’m like if I mess up, I always go straight to the worst things. And I don’t know why” (Pastel, personal communication, February 24th, 2022).

She continued in her reflection by mentioning art class, in an earlier session as I introduced Pastel and her eligibility for this study I mentioned my concern for this student’s continued love of the arts, citing the very disruptive cycle of all or nothing thinking that would often take over her ability to enjoy creation and lead to dependence on the teacher to help her manage her physical reaction to perceived errors. Pastel made it clear in this interview that she was aware that her thinking had gotten in the way and shared a similar fear that if she continued to make ‘bad art’ she would eventually hate making art for some time. Pastel went on to say:

I don’t want to have any anger over anything or something. So I’m thinking if we can do this, and you can give me something and I can do it, if I see a smudge, I’m not going to go, “Oh my god we need to fix it right now.” I’m going to go, “That’s fine. I’ll make a cloud there or a heart and something to cover it. And make it look like it was supposed to be there instead of freaking out and ruining it” (Pastel, personal communication, February 24th, 2022).

Pastel was really looking for a solution to these problematic feelings, but knowing from my own observations of this student's journey so far, it would take a lot of effort on Pastel's part to try and keep her thinking process in check.

**Pastel's SI sessions.** As stated in my individual session protocol, all participants received the same initial training and explanations to begin the study. The ideas behind using the self-instruction technique were immediately interesting to Pastel who knew some of her struggles came from her thinking patterns. However, as I began to model how to use this strategy while creating artwork, I lost Pastel's focus and belief for a time. Pastel reflected at random times throughout the study how 'weird' she had thought it was on our first few days when I modeled how SI works, that she needed to listen to me 'talk to myself' and then purposely talk to herself out loud as well. Once she understood why and actually attempted its use fully, it felt less 'weird' for the participant and she became more comfortable with the idea and practice. During our first few sessions, Pastel struggled to utilize SI fully as she was resistant to talking out loud about her decisions and thought processes. The act of writing self-statements however was embraced from the beginning of the study even if she did not always utilize them at first. *Figure 42* shares the self-statements this participant made for herself to begin the process of SI training.



Pastel	
I will do great.	I will not give up!!
I will not give up!!	I am doing great!!
I am doing great!!	I can <del>be</del> do this!!
I can do this!!	
Amazing!	
I will get through this!!!	
I believe in myself.	
I will find a way to change my mistake.	
I feel great.	

Figure 42. Pastel's Self-statements for beginning an artwork or correcting an error.

During our first session, Pastel reported that minimal help was given by using self-instruction. She explained that talking as she worked made her feel a little better, but that she could have been 'fine' without them as well, a similar reaction to SI at first among most of my participants. The second session brought more feelings of success as Pastel began trying to utilize SI more; she noted that telling herself that she could do something helped her feel a little more confident. Pastel's third SI session came a little later than anticipated as the student was absent for two consecutive meeting times, when she did return to our individual sessions at the end of March, Pastel needed a more



thorough review of how to utilize SI independently, she was able to pick these skills up again rather quickly, she finished the work started during this session when she returned at the beginning of April for her fourth session. She also began to start using SI in whispers and covertly during this class. Pastel reported positive changes in feelings of capability after using self-instruction during this session and was very excited to take home the artwork she made during this session, pictured in *figure 43*, in honor of her mother. Pastel reported during the self-assessment that SI was helpful because:

It helped me feel less worried because I was saying it in my head and it made me feel more confident. It made me find the idea right away of what I wanted to fix and how I wanted to fix it. .... [I was] Less worried about my artwork and if it would turn bad because I felt like I believed in myself while reading my script lines in my head” (Pastel, personal communication, March 31st, 2022).



Figure 43. Pastel's completed artwork in honor of her mother, SI session # 4.

Pastel had four more SI trainings scheduled at this point and showed independence in utilizing self-instruction to make artwork in each remaining session. Similar to Blue Monster, Pastel, as she became more accustomed to using SI, began using it more covertly and in whispers as she worked. Later when asked about using SI Pastel often forgot she had used the technique or thought she had used it less than I observed or had recorded. This was particularly noted during sessions six and seven, while Pastel was creating an artwork based on an instrumental version of a song she liked called “Pink Fluffy Unicorns Dancing on Rainbows”, originally written by a youtube artist named

Andrew Huang in 2010 (Huang, 2010). You can see Pastel's artwork in *figure 44*. This music really made her happy and she was slightly distracted by it, however, she did stop and automatically use error scripting when she made small mistakes, when asked if she realized she was using self-statements at all during class after I helped her remember doing so, she said: “No, I didn’t realize until just now when you told me, I forgot it was normal” (Pastel, personal communication, April 18th, 2022).

This more internalized use of SI was also seen in class during the last few sessions. Session seven and eight of our individual training sessions had a notable occurrence that affected Pastel’s feelings of capability and worry. I observed Pastel's use of SI during both sessions and she needed minimal prompting from me if at all to continue or create new artwork. Pastel did report that she was feeling unwell during both of these sessions, particularly during session eight. These feelings of unease created worry that was unrelated to her art-making and she needed some assistance in talking through these worries. I helped her communicate with a guardian about these concerns. I noticed during session eight that Pastel rated her capability to make art a little lower than I would have expected due to her complete independence during creation that day. It was clear during these two sessions that Pastel's physical well-being did also affect her ability to work and reflect as easily. The quietness of these sessions was unusual as well, as Pastel enjoyed talking and communicating with others. To see a summary of Pastel’s self-reflections during SI sessions, please see *figure 45*.

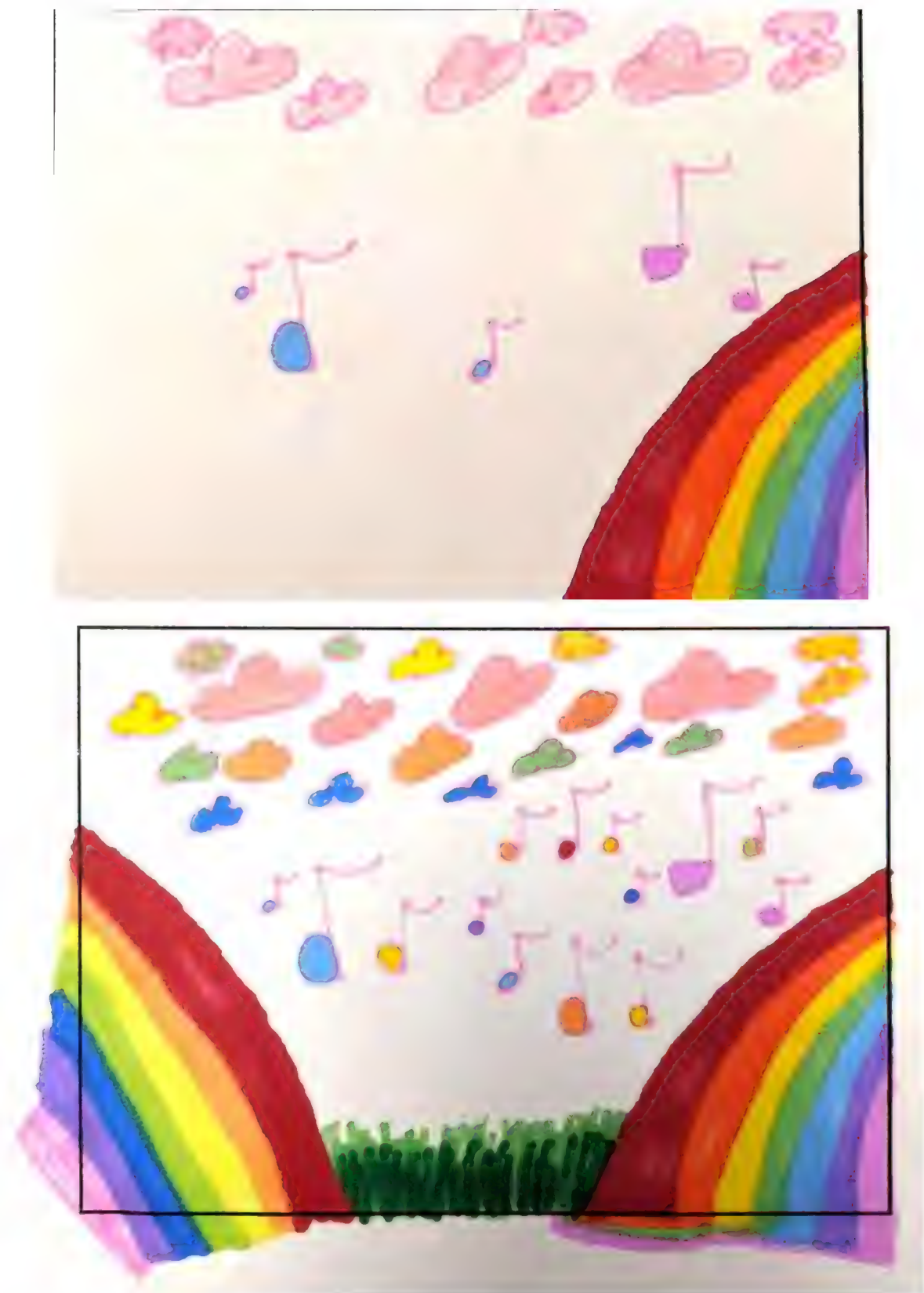


Figure 44. Pastel's music inspired drawing, session # 6 (top), Session # 7 (bottom), April 2022

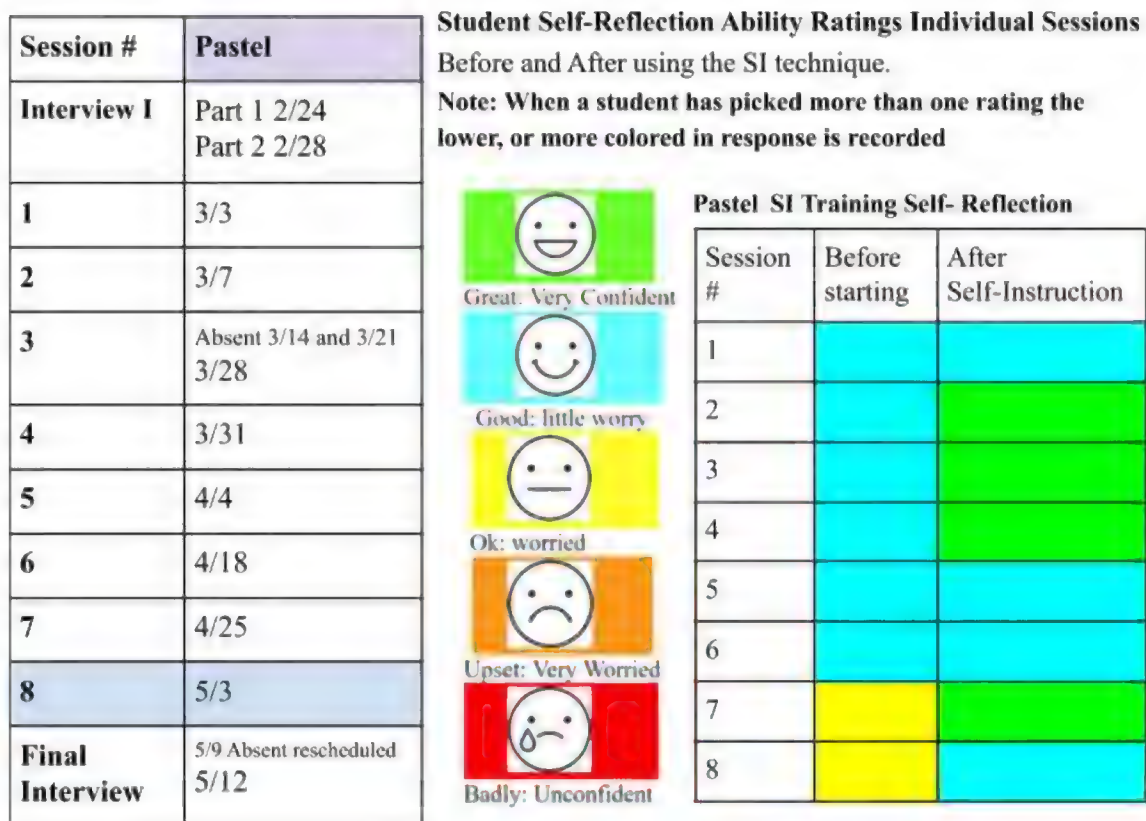


Figure 45. Pastel's SI Self-assessment results before and after sessions.

**Pastel in-class sessions.** The first two data sets I have from Pastel in class were taken before she had her first SI training. Both classes were rather typical classes for Pastel over this year, starting off strong and attentive in her art-making only to have one perceived mistake pull her back to needing teacher intervention to get through the class. The project worked on during these classes was a self-portrait on a ceramic tile that would be installed in the school; this was a tradition for all fifth-grade students and Pastel's focus on this project was understandable. During the first class, Pastel's response to creating an error was to erase a nearly complete drawing of herself using accurate measures of proportion. The attempt to recover this drawing as well once I intervened was very challenging and led to more distress and negative self-talk behavior in which I

was actively trying to help deescalate as they became consistent and the student began listing ways in which she was unqualified or unskilled. Eventually, I began a tally of negative self-statements the student made when this behavior began to cycle heavily, and ended up with a tally of twenty-eight over the course of the remaining five minutes it took for me to calm the student enough to try and move on. The next class was challenging for Pastel as well but was not as heavily negative as the class before. Pastel spent time glazing her tile; she only began to exhibit negative behaviors once the glaze began to dry as the change in intensity of color worried Pastel. This was a concept that had been carefully covered in our demo that day, but the reality of it did create worry for the student. I helped her move past this worry, by reminding her of the properties of glaze and by guiding her through the creation of an error script using targeted questions. These interventions were helpful and she was able to remain calm during the rest of class but asked for continuous reassurance.

March 10th, 2022 was the first class Pastel had since learning about SI training. She was behind in her tile project at that point and was expected to finish her glazing independently along with a few other students. Pastel had a visual checklist to help her stay on track which I reviewed with her before class. She was mostly independent, utilizing the checklist, but interrupted my teaching of other content to ask for reassurance after each step before moving on. At the end of class, she noted that she had not used SI as she forgot about it and it felt hard to use something different for the first time when I was not working one-on-one with her. The remaining four classes I took observation data on during the study showed a significant change in Pastel's ability to be independent in class. During these classes, the student was working on a project-based around a variety



of paper cutting traditions, during these classes no negative self-talk was overheard or reported, which was a huge change. The student did still exhibit worry at times and during two of the four sessions reported using SI on her own, with success. In the other two sessions, I helped Pastel use SI at some points using guided questioning, which I was at this point utilizing with all of my students. A summary of Pastel's reflections on the use of SI in class can be found in *figure 46*.

### Student Reflection: In-Class self-report



\* Blank = no answer      N/A if SI not used

Questions asked:

1. I made an artwork today:
2. I felt worried or unsure today when I was making art.
3. I thought about, said, or read the sentences I made to help me if things got hard?
4. If you used your sentences, did they help?

### Pastel

Date	#1	#2	#3	#4
3/10/22	Yes	Not Sure	No	N/A
3/18/22	Yes	Not Sure	Yes	Yes
3/28/22	Yes	Yes	No	N/A
4/5/22 * late to class	Yes	Not Sure	No	N/A
4/20/22	Yes	Yes	Yes	Yes

Figure 46. Pastel's In-class Exit Ticket Summary.

**Pastel's Final Interview.** Pastel had her final exit interview on May 12th, 2022.

The focus of this interview, as mentioned before, was to discover changes in the students' feelings about art and their experiences regarding the use of self-instruction. Pastel worked on a painting during the interview; it is pictured in *figure 47*. When asked about arts accessibility to all, Pastel, as she did in our first interview, maintained the view that art was for everyone, and could be made by anyone seeking to make it. When asked about her own work, she said she was feeling good about her ability to make art at this

time. When I asked Pastel about word choice and if she felt it was important, we had the following correspondence.

**Pastel:** Yeah. Because you're the one that's trying to, you know, make yourself excited, and make yourself feel better. By talking to yourself, you're trying to make yourself feel better about your artwork is what we've been doing. Like let's see if I put blue right in there, there was a line of blue. [Painting and using SI as we conduct our interview] And I could say how could I fix this? I can make this – I can make a rainbow. Like just start it from there so it's a line rainbow, and the arch rainbow. And I don't know, maybe that's an art idea. Maybe I'll do that.

**Teacher:** Maybe you could.

**Pastel:** But not now. I'm too –

**Teacher:** But what if you happened to – what if you said something – so those were – those statements that you were just making were like positive statements to reassure yourself.

**Pastel:** Why would you say something bad to yourself about your art?

**Teacher:** But sometimes people do, right? Can you think back to times when you had done that in the past?

**Pastel:** Well yes.... People do. But that's the people that think that, "Oh no. It's completely ruined." And there's nothing like – nothing like – if you hit rock bottom on your painting, there is nothing you can do to fix it. Even though there is white out.

**Teacher:** Is that ever true, that there's nothing you can do to fix it?

**Pastel:** No. But that's what people make themselves think, which makes them be like, "Oh no. This is horrible." Because if they see an opportunity, they're like, "OK. I'll do that opportunity." But if they're those types of people that just know, that just know, they don't actually think about this deeply. To think, "Oh wait. Here's an idea." They just make themselves think, "Oh no, it is ruined. No fixing it. Just ruined." (Pastel, personal communication on the importance of word choice, May 12th, 2022).

Pastel's way of answering this question was intriguing to me. She agreed that words were important and cited that we want to use positive word choices to build ourselves up. Curiously, she also gave an example about 'other people' who use negative self-talk regularly, reciting possible thoughts these people might have with someone or themselves. All of the phrases and thought patterns she theorized as being problematic for other people, were phrases I have repeatedly heard her use in the past to describe herself and the artwork she made when overwhelmed. She also offered an understanding of why



these ‘people’ say these things, explaining that this phrasing comes from a lack of deep thinking. Speaking more about SI and its usefulness when deep thinking is needed, Pastel explained that:

Like for example, if I felt like I did like a really, really bad one, and talking to myself out loud or in my head helped me feel a bit better and calm down to understand what I can do to fix it and change it. But on the other hand, you know, like it didn’t really, really help. Because these are only really needed for like if you feel like doubt.... For yourself. Like if you feel like this painting won’t work, if you feel like it won’t make it out as a good painting. But if you’re already in a positive track, you don’t really need them. Because these are like, ‘How can I fix this?’ But you’re thinking, ‘how could I make it better?’ (Pastel, personal communication, May 12th, 2022).

Pastel was the only student who referenced a clear distinction between times when SI should be most effectively used. She believed this technique would be helpful for everyone but recognized it would be harder for some people to figure out how to use it because it could initially feel awkward, she thought that some people might not give it a chance because of this feeling, even though it was really helpful.

Pastel spoke about the use of SI in the art classroom on her own and expressed the following thoughts.

**Pastel:** Well, it felt kind of good. Because in art class, I get kind of like upset if something doesn’t turn out. So I do use this technique for art class, because it makes me feel better about my art.

**Teacher:** OK. So you felt like after like you got used to doing it, it was –

**Pastel:** It was easier.

**Teacher:** – helpful for class. I was really hoping that would be true. Because, in like class there are so many people, and I can’t I can’t always spend as much time helping you quite as much as I would like to sometimes, and I want to make sure you all know how to be independent too, so.

**Pastel:** Yeah. Because in class, it’s supposed to be a challenge for kids. Not for the adults to help the kids.

**Teacher:** That’s true. Because it is your artwork, and it’s not mine. I am here to help you figure out how to do what you want to do.

**Pastel:** Exactly. So I know you would like to help the kids, but you have to let them do it themselves to show that they can do art themselves.

(Pastel, personal communication, during Final Interview, May 12th, 2022)

Using SI in class, according to Pastel, was helpful in creating her own reassurances and making it easier to start work. I also noted the change in understanding for this student regarding my reluctance to draw on students' papers for them, or other versions of this type of 'help', somehow though this study period, she came to the realization that this was purposeful, so students would see themselves in their work. Overall, Pastel reported that self-instruction training was weird to start with, but became very easy and was helpful for her thinking. She also agreed that she planned to continue using this process to help keep away negative feelings while she is working. She reported that she had been using SI at home while making artwork with her brother and plans to continue to use it in the future. For a timeline showing Pastel's changes in perception over time, please see *figure 48*. To see more examples of Pastel's data, please see *Appendix G*.



*Figure 47.* Pastel's drawing made during the Final Interview.

**Pastel's Timeline**

C- In-class data

SI - Individual Session

2/22	3/2	3/3	3/7	3/10	3/18	3/28	3/28	3/31	4/4	4/5	4/18	4/20	4/25	5/2
C	C	SI 1	SI 2	C	C	C	SI 3	SI 4	SI 5	C	SI 6	C	SI 7	SI 8

**Timeline Key**

Observed or Reported instances of:

Negative Self-talk	Other Maladaptive behaviors	Reported worry	Independent problem solving and reassurance	Dependence on teacher for reassurance and support problem solving	Positive report of change after SI use/ SI was helpful	SI used with help	SI used independently
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Figure 48. Pastel's Timeline Data.

***Raptor's Journey***

Raptor's journey through the use of SI was not as smooth as his older peers in the study. Raptor began the study with an interview as all participants did. Raptor particularly enjoyed being audio recorded as he found it entertaining and a reason to tell me more jokes so I could enjoy them again later. Despite the silliness, and later impatience with all the questions I had, we had a rather successful interview. Raptor shared with me his love of animals, comedy, running, and art, and expressed his proficiency and extreme confidence in all of these areas. My classroom data before the study began however showed dissonance with his statement of confidence in the art room while making art. This was not unexpected however as this student consistently starts with a high level of

confidence in his abilities, but struggles to keep these feelings during moments of frustration. Raptor actually described this phenomenon in his interview saying:

I get this weird feeling like, if it's not curvy enough, I usually erase it, and do another one to make it kind of like perfect, and I need to stop worrying about how my artwork looks, and I just need to really just be calm with it, and I can make it something even more nicer than it looks right now. (Raptor, personal communication February 16, 2022)

Expressing how he knew he needed to be 'calm with it' showed he was conscious that this feeling and other feelings of frustration and the words associated with them were not helpful and could use 'calming'. This interview made me feel very confident that Raptor could benefit from this training as a way to help his brain refocus. Along with this incite Raptor also admitted he often felt like his abilities were 'stuck' for right now until he becomes a teenager, and that he could not see his feelings of being 'bad at something' change right now, even though he was not referring to his own art skills at this moment, this was a concerning statement that I felt the practice of SI could potentially impact.

**Raptor's Individual Training Sessions.** Over the next few weekly sessions, several barriers began to arise in Raptor's ability to fully participate in the study. Meeting at the end of the school day on Friday, our first scheduled day, became problematic when admins began a positive behavior reward drawing for students which distracted Raptor's attention too much to retain the information I was trying to teach him. One actual SI lesson was given on March 4th, where Raptor was introduced to the SI process, which like some of my other participants he thought was a little odd and silly, not treating it seriously, but participated in the process with the teacher guide to create self-statements and begin using scripted, descriptive language to review what he was doing. Raptor joked around a little and by the end of the session was able to create the artwork seen in *figure*

49. He reported that the technique I was trying to teach him was a little helpful, but that he would have been fine without using it as well. The student used a Chromebook to look at a reference picture of Charizard while drawing. Overall this first session went pretty well as an introduction.



Figure 49. Raptors Charizard drawing March 4th, 2022.

Assemblies and extra recess also ended up interrupting our calendar causing more inconsistency and confusion which would continue throughout this student's experience in the study. Session two was a little harder, the student had reported having a bad day and was not in a positive mindset to start. After a short review that had to be cut short, due to teacher-perceived signs that his attention span was waning, Raptor started off strong in his work, and utilized self-instruction, however, when a perceived error occurred, Raptor attempted to use an error script, which did not immediately pay off as



quickly as he hoped, and the students spiraled into negative self-talk. The teacher-researcher tried to help initiate new scripts and assist Raptor out of his negative thinking, but Raptor was resistant to attempting SI after this perceived failed attempt and did not want to talk at all when most frustrated. Before the end of the session, I was able to help Raptor calm down enough to create something he was happy with. Using a reference picture, Raptor successfully drew a chameleon and was in a better mindset at the end of the session.



Figure 50. Chameleon, by Raptor, March 15th, 2022.

As can be seen in *figure 52* Raptor's next session had to be postponed again due to an assembly the following week, session three ran on March 29th, and session four became the first time we were able to meet two weeks in a row, only for it to be disrupted again by spring break. Sessions three and four were also a little unusual with the student

reporting having had a bad interaction in class before the meeting. He also at this time became very obsessed with directed drawing videos. This was a curious development as Raptor spoke of directed drawing videos in our entrance interview, claiming they stressed him out. However, Raptor could not be convinced to avoid these types of drawings in our SI session; he knew one of the norms I set with him in the beginning was that the themes were flexible and he could change them. I of course did try to convince him not to use these videos during training as I guessed they could be distracting from the ability to concentrate enough to use the SI technique, and due to the fact he had told me they were stressful, and this was meant to be a low-stress experience. Though these things were explained, Raptor insisted that it would be ok and he could do both, expressing that he did not want to participate in making art at all right now without the directed drawings as a prompt, it was all he wanted to do and his 'only idea'. Reluctantly I ended up allowing it which led to a less than pleasant experience. Raptor became upset, resisted using SI as an intervention, and asked me to stop trying to assist him to do so. Instead, he tried several attempts to start over with a new image, and on March 29th, he eventually created a drawing he was happy with but did not actually train in SI as intended. Some of his attempts can be seen in *figure 51* below.



*Figure. 51* Examples from Session 3 Raptor, March 29th, 2022.

The next training on April 5th was a little smoother, Raptor minimally used the SI technique with a lot of prompting from the researcher. He was in a better mood that day and just wanted to talk about life as he colored the sea turtle that he made during the last session. At the end of the session, Raptor reported that using SI helped ‘a little’ when he became frustrated with markers not working, but I was hesitant to call that small moment a real practice session, and it was not recorded in my observations as Raptor having used the SI technique that day, however, it felt like a positive step.

Our next session was not until April 19th, 2022 due to spring break. Directed drawings were again a debated subject at the beginning of the session. Seeing that we could be heading to a power struggle dynamic in our conversation about its use, the researcher eventually let the student try and utilize these drawing videos to make an artwork, as the student’s mindset was too focused and resisted making one without them. Again, as seen before, this type of drawing, along with the drawings chosen, did not mesh with the use of SI for this student. After several attempts and with teacher support to attempt SI interventions, which were largely ignored, the student decided he needed to stop for the day. After the conclusion of this session, the teacher-researcher reflected on the amount of time left to conduct the study, three weeks in total, and student use of the SI technique only demonstrated in part with teacher help in sessions one and two and made the decision to cease data collection for this student after day five of SI training. Raptor’s attendance log and self-reflection data on his ability to make art and use of SI can be seen in *figure 52*. This decision was not taken lightly. Raptor enjoyed coming to our individual sessions, despite the frustration displayed in the previous sessions. He enjoyed talking and spending time with my fish, Lila, whom he adored, and often tried to



stay after sessions to help me clean the room or tell me more about life, both on days he had success and more stressful days. However, this single-minded preference and instance upon directed drawing, the lack of evidence showing Raptor was utilizing the strategy being taught, with or without assistance, as well as our inconsistent ability to meet and practice regularly, spoke to a need to start over from the beginning if I wanted to have an accurate understanding of whether the student would benefit or not from the use of SI. I do not feel comfortable making any conclusions for or against this intervention with this student, as I do not have evidence that the technique was actually learned or practiced independently as student reflections were observed to have been given impulsively and changed consistently, and Raptor did not clearly show me he had complete understanding in what we were attempting. Without the time needed to conduct the full training with this student again, the decision was made to stop the data collection process and allow the student to continue attending for his remaining three time slots that could be used to socialize, make art, or work around the art room.

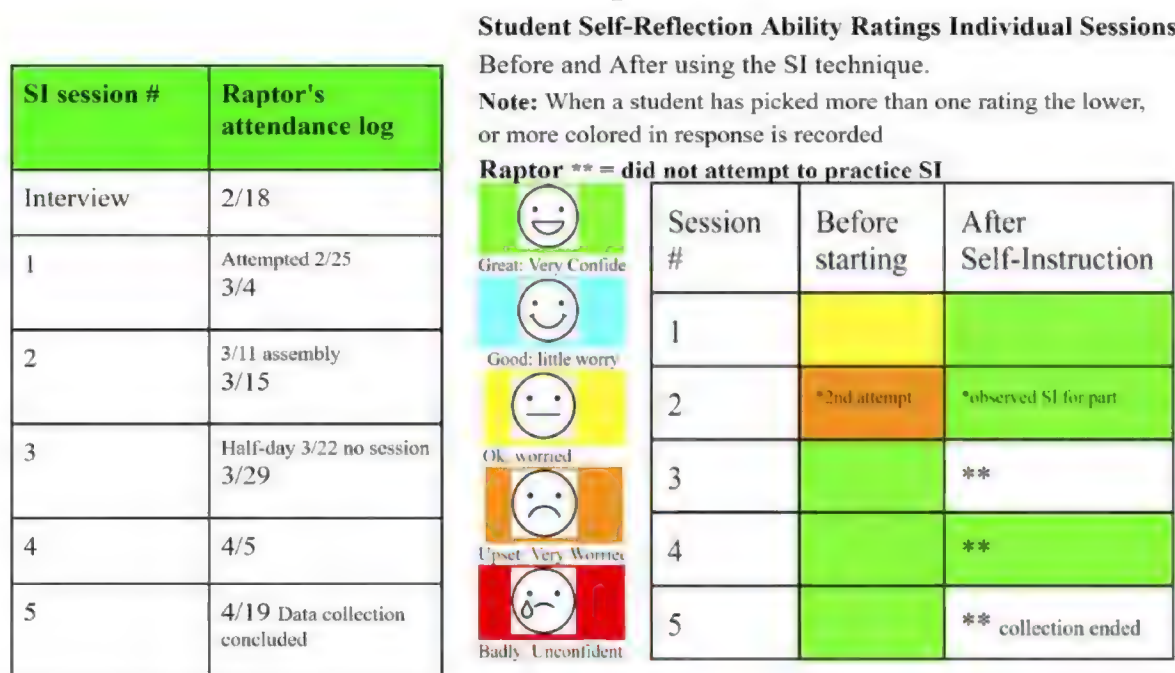


Figure 52. Raptor's Attendance Log and Before and After Ability Scale Reports.

**Raptor In-class.** An interesting occurrence was noted in my data set regarding in-class observations which prompted me to keep Raptor's data as part of this report. While compiling data I noticed that Raptor's use of negative self-talk and need for assistance when working through challenges stayed consistent throughout the study. This was a correlation that did not surprise me as I knew the student had not been practicing the technique we were trying to learn, I was attempting to implement an intervention that was not followed through with consistency or fully embraced by the participant so I was not expecting much change in the student's data regarding their feeling or dependency on the teacher during productive struggle. These needs stayed prevalent during the study, as seen in *figure 53*, which shares Raptor's timeline and observational trends during the study. More detailed matrices for Raptor can be found in *Appendix H*.

**Raptor's Timeline**

C- In-class data

SI - Individual Session

2/28	3/4	3/8	3/15	3/16	3/29	4/1	4/5	4/18	4/19
C	SI 1	C	SI 2	C	SI 3	C	SI 4	C	SI 5

**Timeline Key**

Observed or Reported instances of:

Negative Self-talk	Other Maladaptive behavior	Reported worry	Independent problem solving and reassurance	Dependence on teacher for support	Positive report of change after SI use/ SI was helpful	SI used with help	SI used independently	Decrease in attention-seeking behavior/increase in independence when working
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*Figure 53. Raptor's Timeline Data.*

After the first independent SI session, small changes began to appear in the classroom setting regarding Raptor's ability to work independently. From the first in-class session after meeting individually one time, it was noted in my observations that Raptor began to show more independence while working and demonstrated less attention-seeking behaviors than typical. The student's need for assistance when worried or frustrated remained, and I often helped guide Raptor through the error scripting process when he needed in-class assistance, which he allowed me to help with in class. After receiving assistance or necessary accommodation, it was observed that Raptor showed more independence during the rest of class, which was an interesting trend considering the distress and lack of willingness to let me assist in one-on-one sessions. This decrease in attention-seeking behaviors such as calling out, wandering the room,

arguing with other students, and intentionally misusing supplies steadily decreased, the last two in-class sessions even showed Raptor working to help others at his table problem solve and use tools. I can not say if self-instruction was helpful for this student as there is not enough support showing the student utilized SI independently at any point during data collection, however it does appear that the student has shown changes in his ability to independently work in the classroom setting.

### **Summary of Findings**

Overall, three out of four participants completed the study as intended. During this time all three of these students show positive correlations toward independence and reported increases in confidence. These three students' use of negative self-talk reported, and overheard by the teacher-research decreased during the study and these students later reported that language use was important to their ability to feel capable and continue on as things become harder. The fourth student had many personal and extraneous barriers that kept him from fully embracing and learning how to use the technique this study focused on. Curiously this student also showed some positive developments during the study. Though confidence levels and use of negative self-talk habits remained the same for the most part. This student did show changes in the classroom setting regarding his behavior, particularly concerning a decrease in attention-seeking behaviors over time. We will discuss these observations more in *Chapter V: Discussion and Implications for the Field*.

## CHAPTER V: DISCUSSIONS AND IMPLICATIONS FOR THE FIELD

### Introduction to the Findings

The study aimed to evaluate a technique for recognizing negative beliefs about oneself and learning to reframe language to promote confidence and displays of independence. The data reported in *Chapter IV* can be best understood and discussed in the context of students' consistent use of SI or comfort level with it and the observed trends in student behaviors and reported feelings over the course of the study.

### *Student Comfort and Application of SI*

Students' willingness and consistent effort to attempt this training was needed to make significant personal gains in feelings of adequacy or confidence during the study. As seen in *Chapter IV*, some students were more readily open to the idea of using SI than others. Three of my four participants initially did not take the idea and the process of learning to utilize SI seriously. The 'silliness' of the process, or how it was modeled, made these students a little more reluctant to try using this process right away or to fully embrace using self-statements in an authentic way that reframed from the use of sarcasm. Triangle was the only student who immediately 'bought in' to the ideas of the SI process and began trying to implement and practice it with full commitment from the first day of training. Triangle needed guidance to help him use SI but did not need extra convincing or reminders to use the technique from the start. Pastel and Blue Monster felt the process was a little unusual initially. They needed reminders to start using SI while creating. Both also thought I was being 'silly' while explaining and modeling the process and joked around a little or used sarcasm to hide some of their own embarrassment while using

narrative scripts during the first practice session. Neither was fully convinced during the first session and needed a lot of assistance utilizing the technique at first. Raptor also had a hard time buying into this technique, thinking it was a little silly over time; however, Raptor had several barriers that prevented him from really getting to learn how to use SI independently; there was no clear evidence that Raptor learned how to use SI independently, but he did use it at some points with assistance. Raptor's involvement and interesting moments of data will be revisited more in this chapter.

*Figure 54* graphs each participant's observed use of the self-instruction technique over time. It is notable that Triangle began utilizing SI right away, most of the time from weeks one to three. Raptor and Blue Monster partly used SI from the beginning, but relied heavily on teacher reminders. Pastel showed less progress in using SI for the first few weeks of the study; it is vital to note that Pastel began officially practicing SI at week three of the study when looking at this graph, so her results are slightly skewed at the beginning. Raptors' results can also be inconsistent; Raptors specific data will be looked at again in regard to his comfort level with and consistent use of SI.

## Student Participation in SI

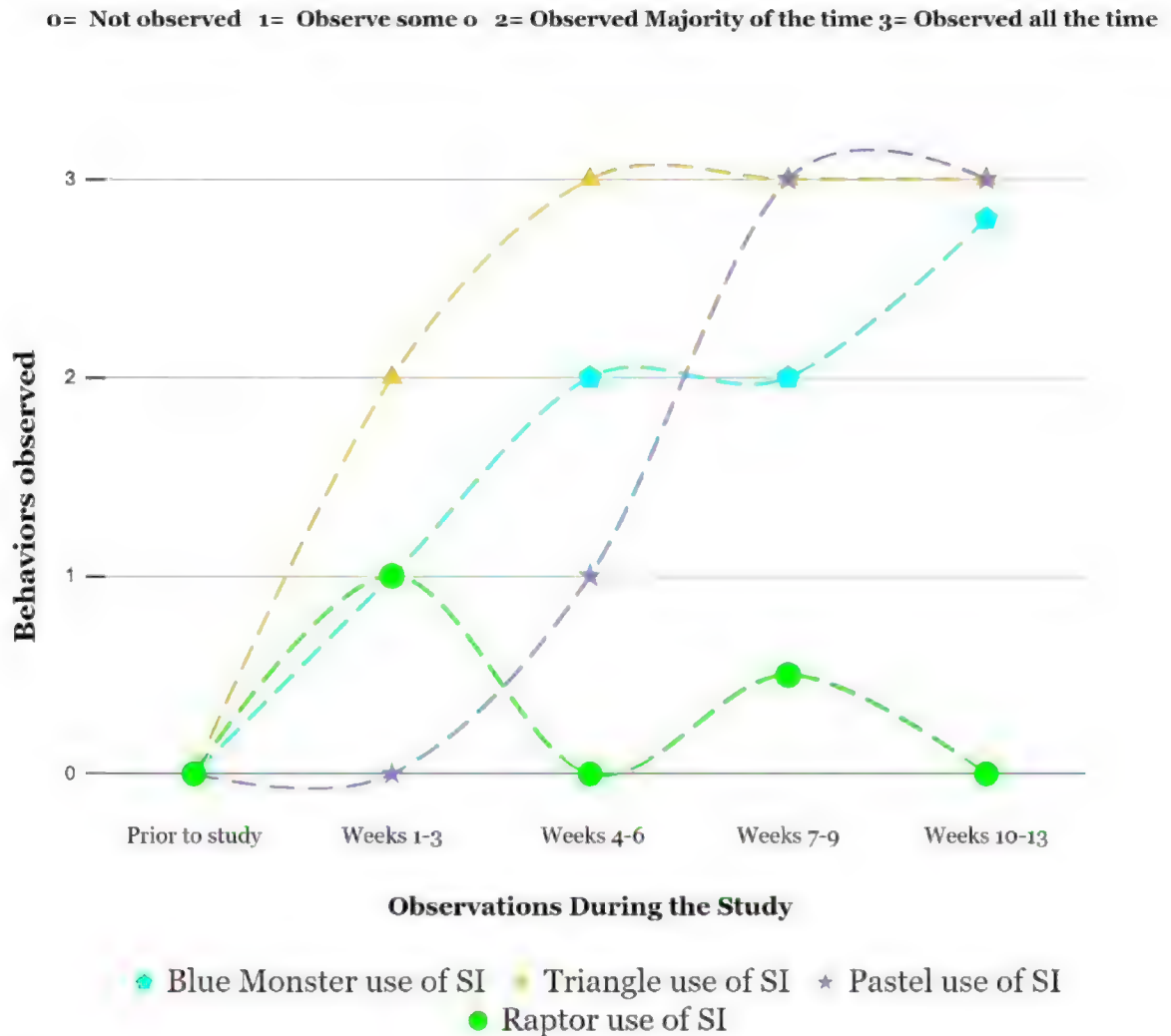


Figure 54. Students' Participation and Utilization of SI.

The three participants who officially completed the training sessions and study all steadily began using the SI technique more often, and more independently as the weeks went on with all three students using SI during individual sessions and in-class by the last three weeks of the study. These students became less worried about the ‘silliness’ of the process and started to utilize SI as they worked, and eventually began to internalize the process, with the participants not always even realizing they were using error scripting

and the narrative process to reassure their thinking. Some of these instances were shared in *Chapter IV* and other recorded moments of SI use can be found in each participant's *Appendix of Coded Data* (see Appendices E through H). The use or none use of the self-instruction technique over time showed correlations with students changing feelings of confidence in their ability to make art.

***Observed Trends During the Study.***

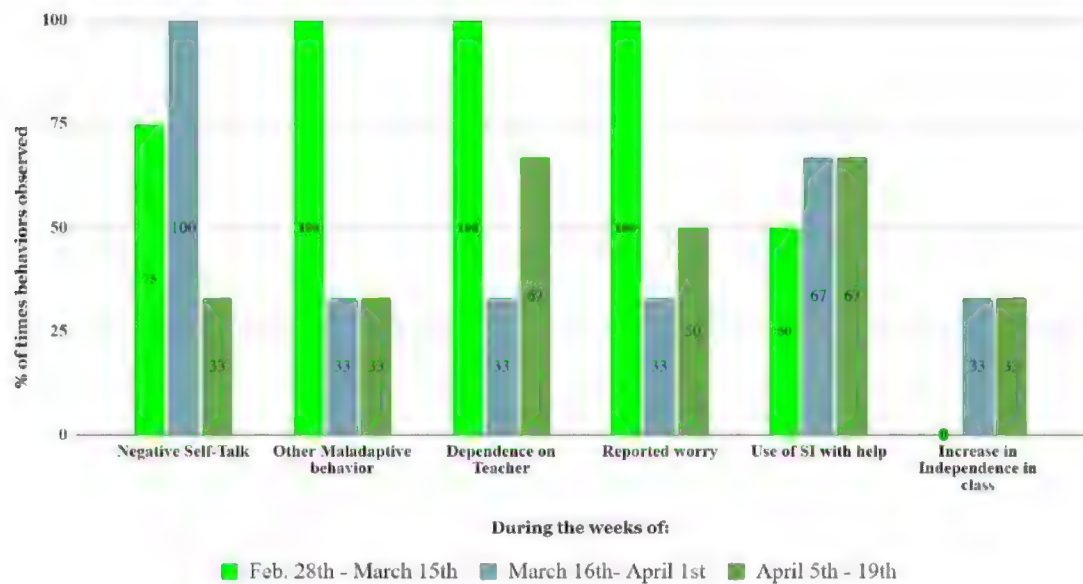
All participants experienced some changes during the course of the study, some were observed by the researcher over time, and others were reported or otherwise recorded by the participants. Data from multiple observations, student reports, and interviews were compiled together in order to make inferences about the effectiveness of self-instruction as an intervention for students struggling with confidence and independence in the art room. This first section will first look at Raptor's data set, who ultimately did not learn to use SI independently. Then a closer look will be given to each of the remaining three participants' data and its relation to SI as an intervention process will be considered. These three participants observed trends will be compared to assess common experiences among participants.

**Understanding Raptor's Experience.** In the previous chapter, Raptor's particular circumstances during the study were reported. Many unavoidable factors came together that interfered with Raptor's training in SI, such as recess, assemblies, and distracting announcements, as well as some student-specific barriers, concerning students' feelings, attention span, and focus on particular drawing activities that did not go along with the atmosphere or attention needed to learn and use SI independently. Raptor's use of SI throughout the study is seen as the green line in *figure 54*. Raptor did not have



consistency at the beginning of our training block in which he could learn to use SI. Our first session went well, but corresponding sessions were either interrupted or distracted in a way in which this student only got to use SI minimally and always with assistance.

**Raptor's Observed Trends**



*Figure 55.* Raptor: Observed Trends.

*Figure 55* gives an overview of Raptor's data during the study. In this bar graph percentages were used to illustrate how often behaviors were noticed since the beginning of the study. Blocks of time were created to separate the data and to help show changes in distinct behaviors during a specific time range so they could be easily compared. Raptor's results show some changes in every category. *Figure 56* illustrates some of this data as well, focusing on the use of SI and observational changes in negative self-talk behaviors.

### Raptors Participation in SI and Observed Changes Negative Self-talk During All Session Types

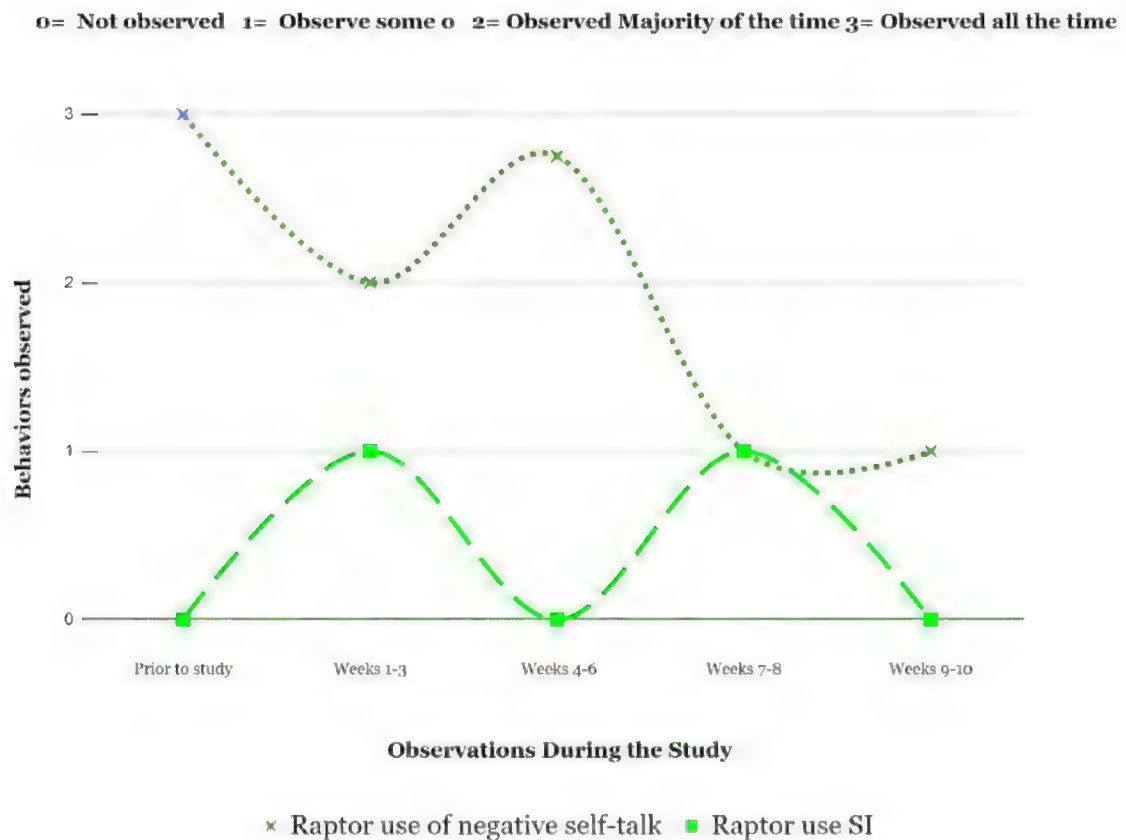


Figure 56. Raptor: Use of SI and Negative Self-talk

This line graph again shows how inconsistently Raptor engaged in SI training, he was not open to the idea during the beginning of the study and the interruptions to our schedule created inconsistency for the student. Raptor's use of negative self-talk throughout the study did not change greatly, Raptor continued to use negative self-talk when he became frustrated during his art-making, and during times when he was less frustrated less negative self-talk was observed. This data was consistent with my expectations, this student's perception of his abilities when frustrated did not change dramatically without the full interventions in place. If looked at carefully, we can see two instances in which Raptor seems to have shown less negative self-talk compared to other

blocks of time. These two instances match up with occurrences in which Raptor showed some openness to using SI with teacher support. This supports the idea that this method may still have had the potential in helping Raptor if the teacher-researcher had enough time to restart the training with this student with more consistency and a new set of norms. Though no consistent positive change was noted in Raptor's use of negative self-talk or reports of confidence as a result of SI training, there were some interesting observations that took place during class sessions that are graphed in *figure 57*.

### Raptor's Observational In-class Data After spending Extra Time with Teacher

0= Not observed 1= Observed Part of class 2= Observed whole class

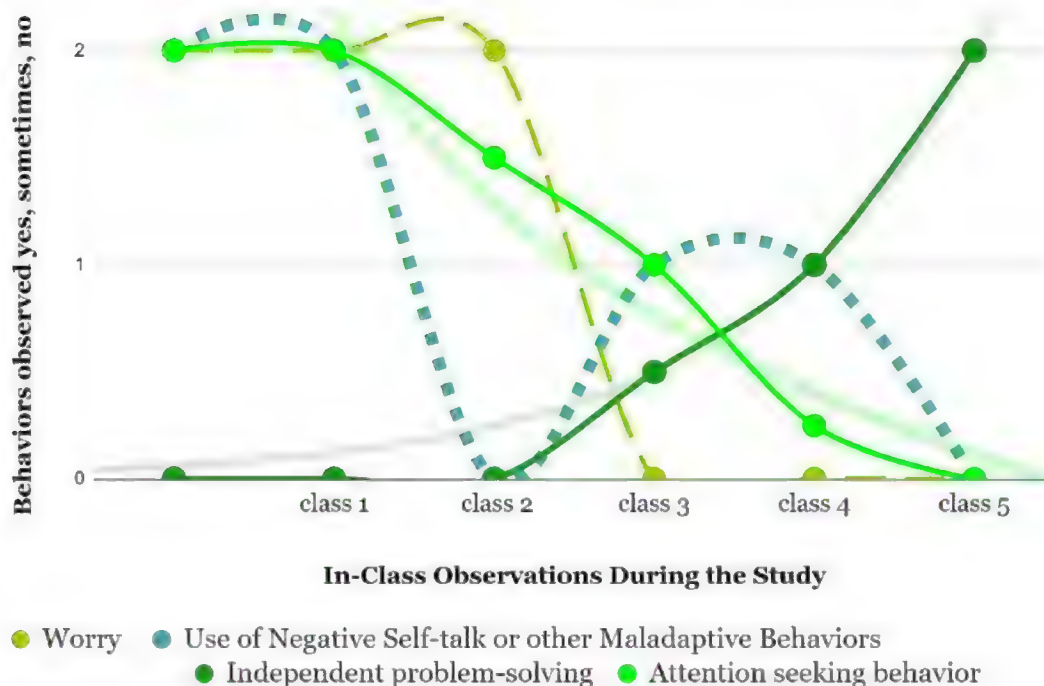


Figure 57. Raptors In Class Data, Observed Changes in Behavior After Spending Extra Time with the Teacher

This graph shows Raptor's observed use of negative self-talk during class sessions which had highs and lows at different points in the study. This graph also tracks

Raptors' observed and reported experiences of worry, use of independent problem solving, and attention-seeking behaviors. Since Raptor had displayed the tendency before the study of acting out in ways to gain my attention, attention-seeking behaviors were tracked for this student more extensively than the other participants. As noted earlier, barriers to our ability to engage with the intervention left Raptor with only a slight understanding of self-instruction technique, and no consistent change in the use of negative self-talk, our individual SI sessions were at times even stressful, however, Raptor was showing positive changes in class after having the chance to start meeting with me outside of class. Raptor began to show some signs of independence in the classroom setting during times he was feeling positive about his work; this independence would cease when negative self-talk or worry was at its highest points but rose again once they were able to continue working. It was also noted that a dramatic shift in displays of attention-seeking behaviors occurred in class during the study which steadily fell over time once the student began meeting with me outside of class.

I would not say that SI intervention had anything to do with this shift as there is no consistent evidence to prove this. I have instead concluded that the positive changes in negative attention-seeking behaviors exhibited by Raptor, such as calling out, distracting other students intentionally, and wandering the room, resulted from a strengthening of rapport between the student and teacher. As SI sessions became problematic for the student I had worried that it would have a negative effect on the positive teacher-student rapport we had built before the study, but that was not the case, in fact, it seemed that these instances had enough positive conversation and gave the student enough individualized attention and ability to share his thoughts and opinions with me that he did

not need to seek my attention as extensively in the classroom. The class in which Raptor spent his year attending art had a very high level of student need, containing a number of students who needed more physical accommodations and support to participate in class. This left less time for me to check in as frequently with individual students. I believe some of the behaviors seen by Raptor earlier in the year were a result of attempting to gain more of my time for himself. When our training sessions gave him the outlet to talk to me more freely and gave my attention more often, his behavior in class was able to shift to more independent modes. As discussed in the literature review, relationship building, and student feelings of safety and care by their teacher influences their ability to learn and work independently (Hammond 2015, and Minahan 2019). Raptor and I had a positive rapport to start the study, but the extra time and specific attention I was able to give him during our individual sessions, even when those sessions were not successful in themselves, helped to strengthen our relationship and let the student remember they were valued by the teacher. This was demonstrated to be true for this student, though he, unfortunately, was still struggling with confidence, the extra time and teacher effort to show care and interest in his life did help bring positive changes to his classroom experience, proving the importance of a little extra time and care in interacting with students.

**Understanding Blue Monsters Experience.** Blue Monster along with the remaining three participants successfully learned how to use self-instruction as an intervention addressing student confidence and independence in the classroom. Blue Monster's observed trends, seen in *figure 58*, show his overall experiences of different behaviors during various blocks of time in the study. Blue Monster began the

study with high levels of negative self-talk, worry, and teacher dependency. After some time, as the student began using SI more independently, the student's experiences of independence and reported feelings of confidence rose, with negative self-talk behaviors lessening in frequency over time.

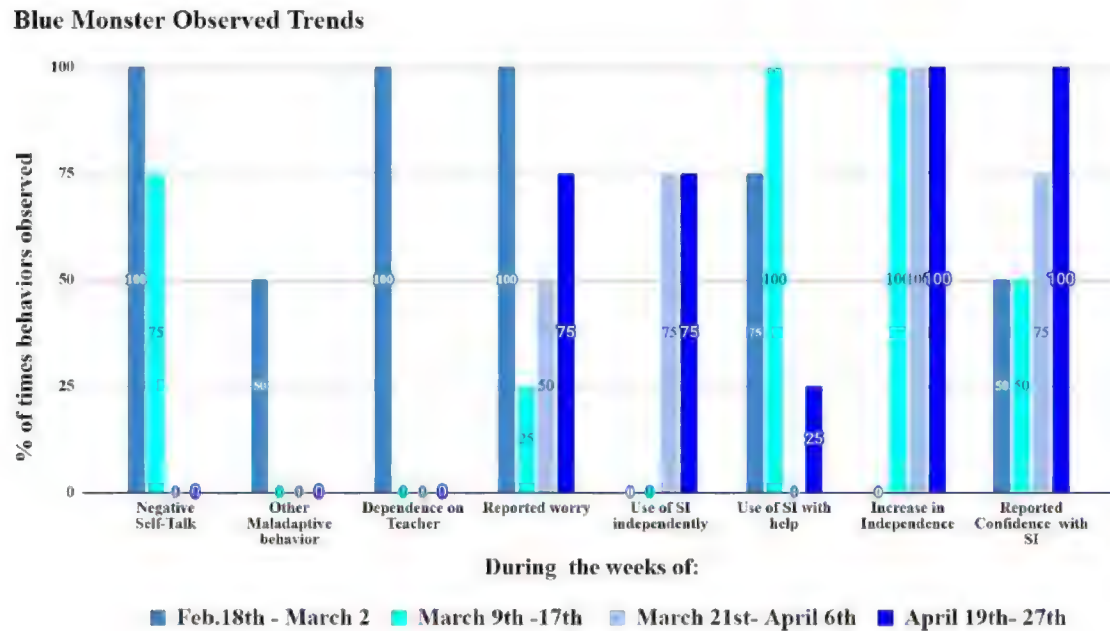


Figure 58. Blue Monster: Observed Trends.

The research question focused on the use of language and how the creation of self-statements might counteract negative self-talk and reduce student self-doubt, which would naturally lead to students increasing feelings of confidence and independence in the art room. This theory proved true for this participant as we examined the comparisons in *figures, 59, 60, and 61*. Blue Monster's use of negative self-talk after implementing SI slowly decreased over time, as can be seen in *figure 59*; the steady rise in observations of student independence was also noticed in this graph.

## Blue Monster Participation in SI and Observed Changes in Behavior and Independence

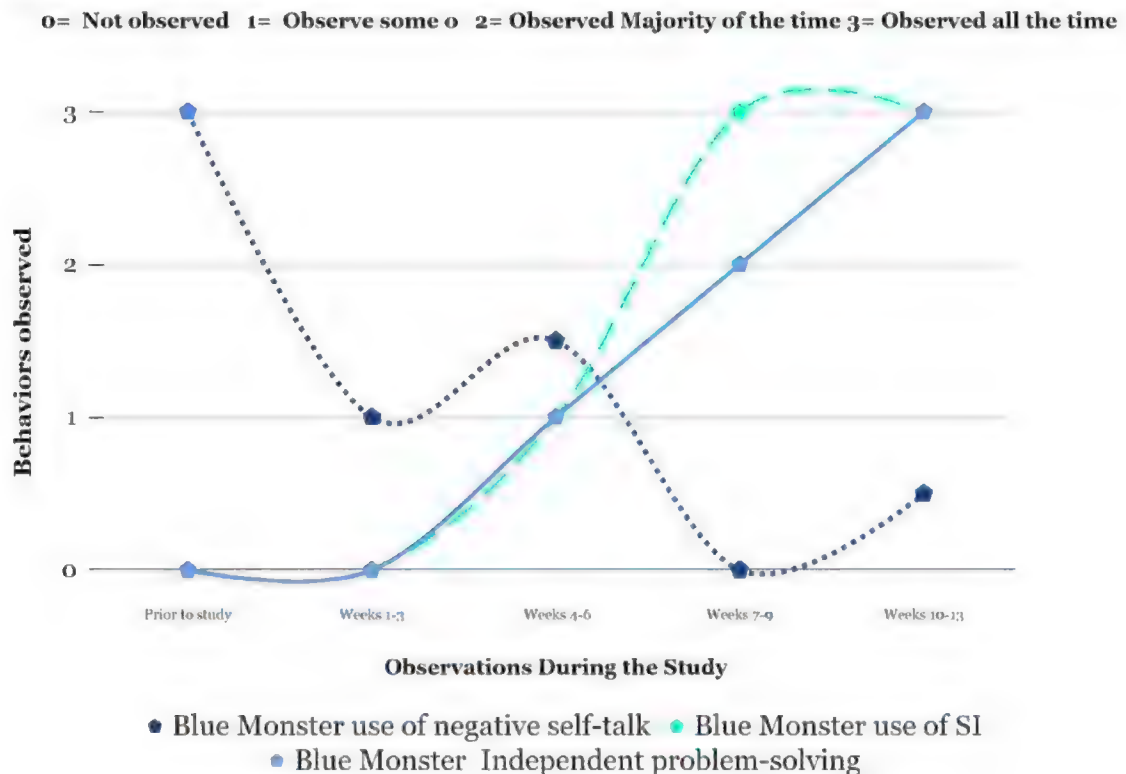


Figure 59. Blue Monster: Observed Changes in Behaviors and Independence while using SI

Blue Monster also began to report more confidence in their ability to create works of art over time while learning and eventually independently using SI training, these trends can be seen in *figure 60*, and the relationship between students' feelings of confidence, and their use of negative self-talk can be seen in *figure 61*. These results show that the introduction of self-instruction training and Blue Monster's willingness to attempt the strategy on his own led to his increased ability to work more independently and feel more confident about his physical ability to create in class.



### Blue Monster Participation in SI and Observed Changes in Confidence

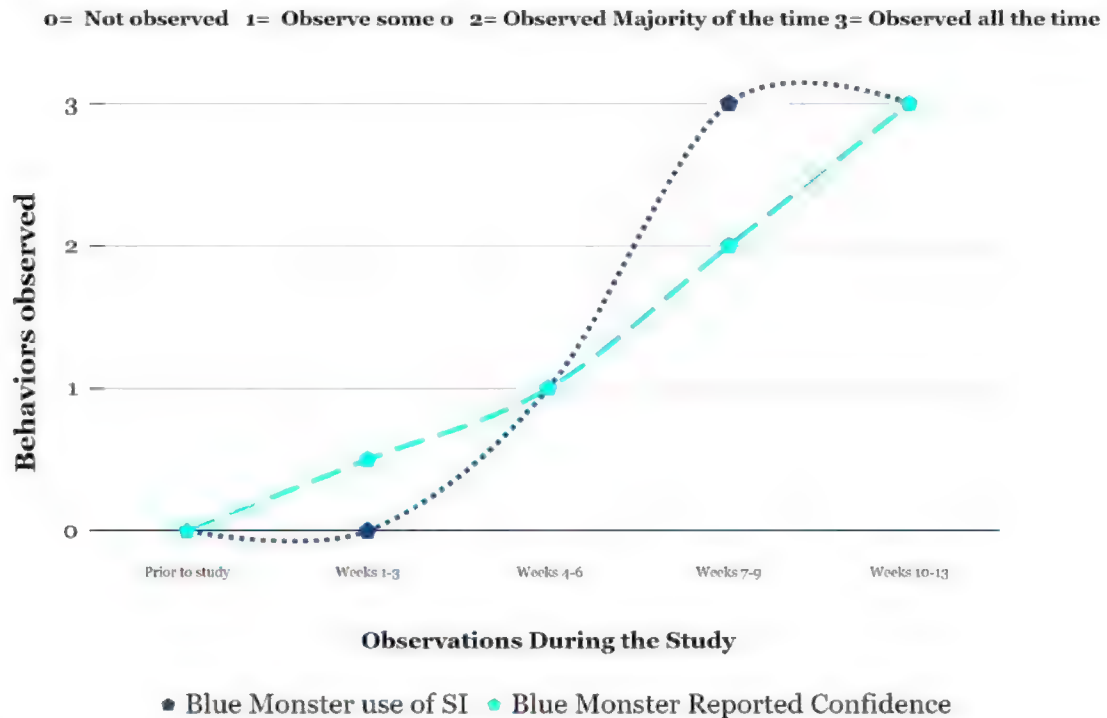


Figure 60. Blue Monster: Observed Changes in Confidence and use of SI

### Blue Monster Participation in SI and Observed Changes in Confidence and use of Negative Self-talk

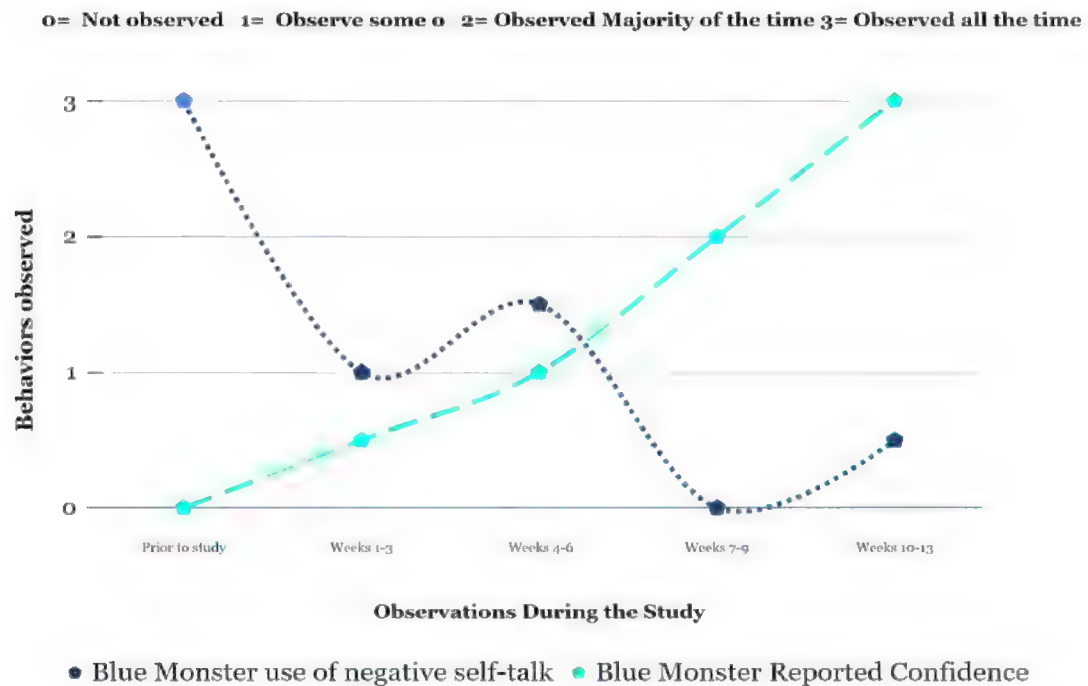



Figure 61. Blue Monster: Changes in Negative Self-talk and Confidence during the study



Blue Monster reported his own ideas about SI and how it was or was not helpful. He reported that his self-statements and the SI process were most helpful during times of frustration, as can be seen in the self-reflection in *figure 62*. He also reminisced often on how SI helped him focus and stay calm when things were not going his way. This also allowed him to start making work right away and spend less time worrying about his work before creating it.



3/23

3. How do you feel about your abilities after practicing your special script sentences?

Great: Confident    Good: little worried    Ok: worried    Upset: Very Worried    Badly: Unconfident

4. Do you think your special script and sentences helped you feel less worried? How did it help or not help?

yes I think they helped bc when I got frustrated I used them and changed my drawing and in the end I liked my drawing.

5. Anything else you want me to know?

No

Figure 62. Blue Monsters drawing from March 3rd, (top) and Self-reflection after using SI

**Understanding Triangles Experience.** Triangle was the only student in the study who, after hearing how the self-instruction technique worked, and why it should be helpful, immediately decided to jump in without worry of feeling silly or need for additional convincing. Looking at Triangles' overall trends in data in *figure 63*, we can see that this decision had a quick effect on his observed behaviors during the time of the study.

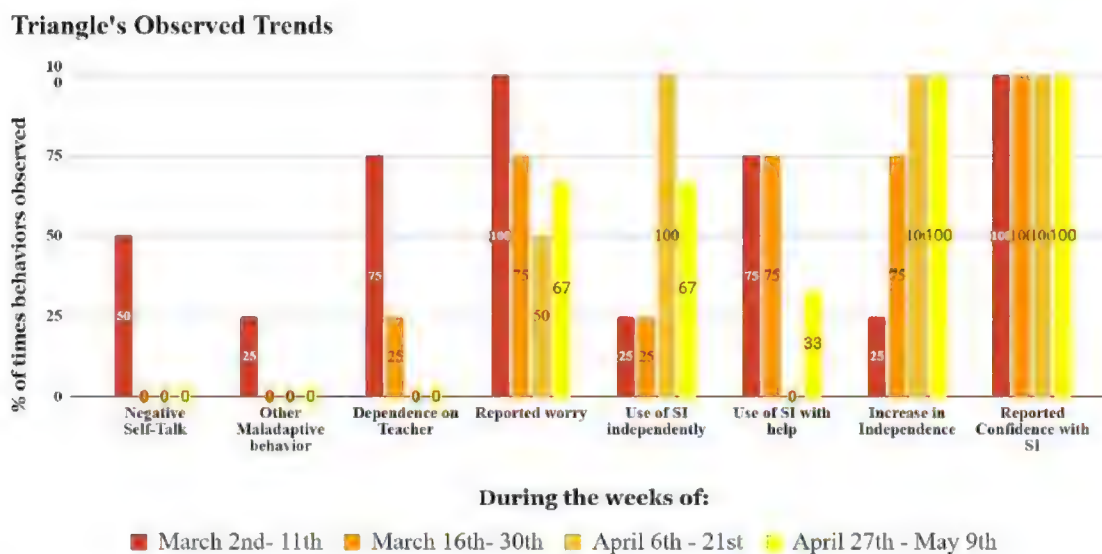


Figure 63. Triangle: Observed Trends.

Triangle worked hard to become aware of his negative self-talk from day one of the study, and showed a significant decrease in his use of negative self-talk within the first two weeks of the study, and refrained from using it at all during the last few weeks.

Figure 64 shows the dramatic decrease seen in Triangle's use of negative self-talk as he began learning and using self-instruction training. Triangle's independence in class and problem solving increased as SI was used and negative self-talk became less prevalent in the student's experience compared to the beginning of the study.

### Triangle Participation in SI and Observed Changes in Behavior and Independence

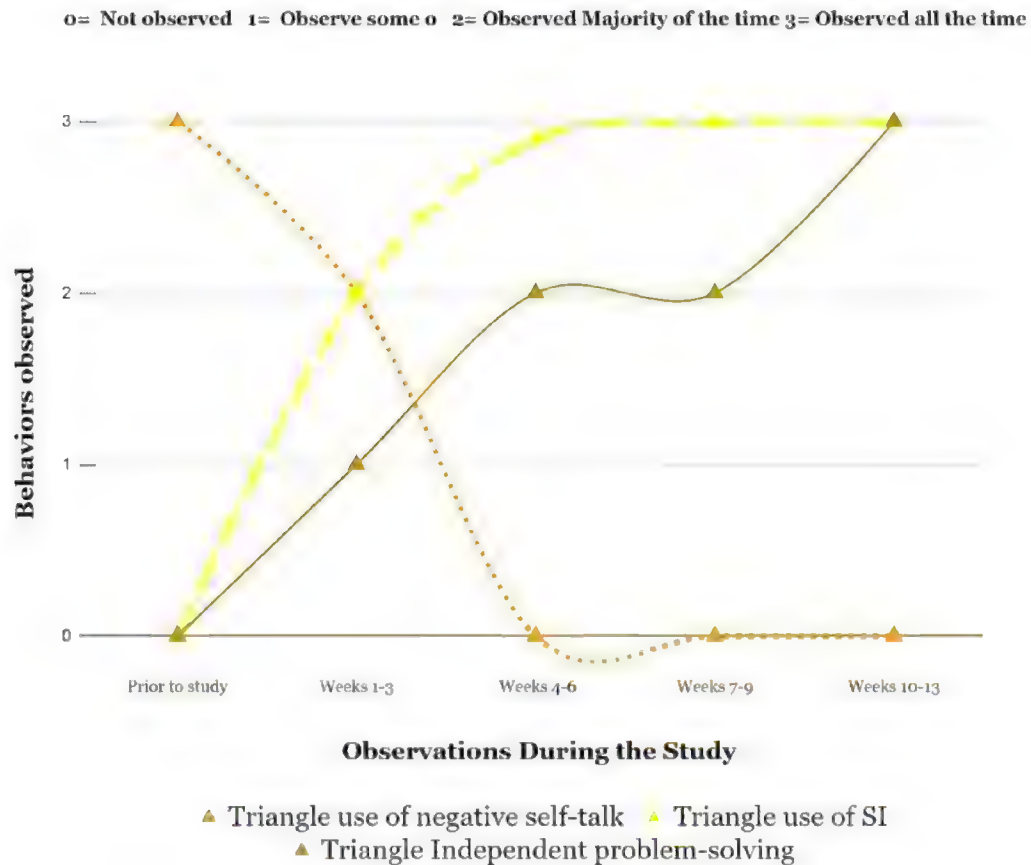


Figure 64. Triangle: Observed Changes in Behaviors and Independence while using SI.

Triangles' thoughts on SI and its usefulness were discussed in Chapter IV, but he also made a point to express its usefulness in planning which in turn helped him become less dependent on teacher support to get started or continue making his artwork over time. He reported in his final interview that SI was very helpful in his thinking process,

I think so because they can help you improve your art. You already kind of have a plan. It helps me to like, plan.....[I felt] Good because they make me more confident and [help me] do my work better (Triangle, personal communication, May 12th, 2022 Interview II).

### Triangle Participation in SI and Observed Changes in Confidence and Negative Self-talk

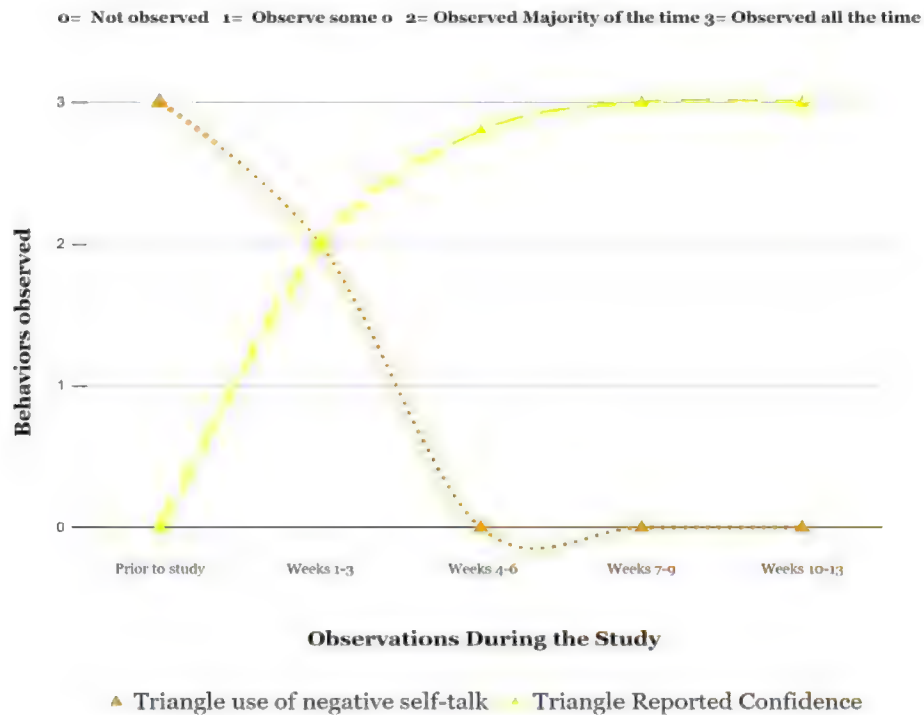


Figure 65. Triangle: Observed Changes Negative Self-talk and Confidence during the study.

### Triangle Participation in SI and Observed Changes in Confidence

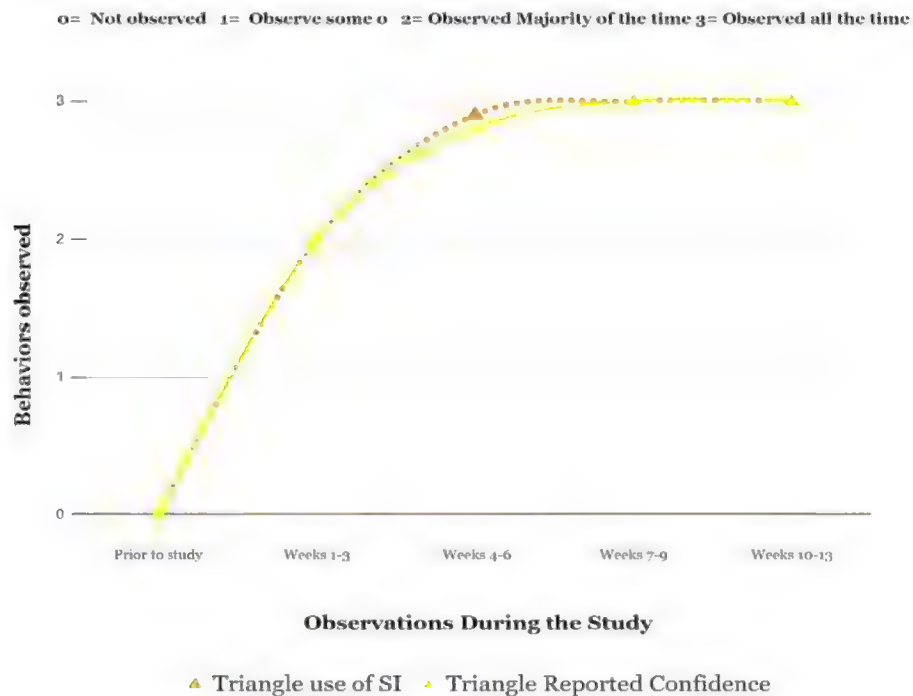


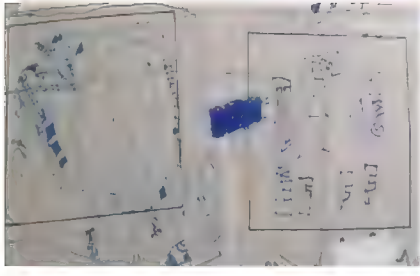


Figure 66. Triangle: Observed Changes in Confidence and use of SI.

*Figures 65 and 66* show Triangles' personal data concerning his use of SI, negative self-talk, and his reported experiences of confidence in his abilities. Again, as we looked at earlier, Triangle immediately began attempting to use SI seriously as a way to help him work independently. He had a great deal of success relieving his experiences of doubt and worry in this study. Triangle even began to take more artwork risks as his confidence levels began to rise; his artwork created over the course of the SI training showed exploration of materials that this student has avoided or struggled using in the past. *Figure 67* shows the artworks that Triangle created using materials like tempera paint, watercolor, and permanent marker without pencil sketching. All of this artwork was considered an experimental risk for the student as these were materials he had avoided or shown a great deal of anxiety using in the past before beginning this intervention.

#### **Triangle, Unexpected Material Explorations in Study**

3/9/22	3/30/22	4/20/22
		
Watercolor	Pen, marker, tempera paint	Permanent marker, tape

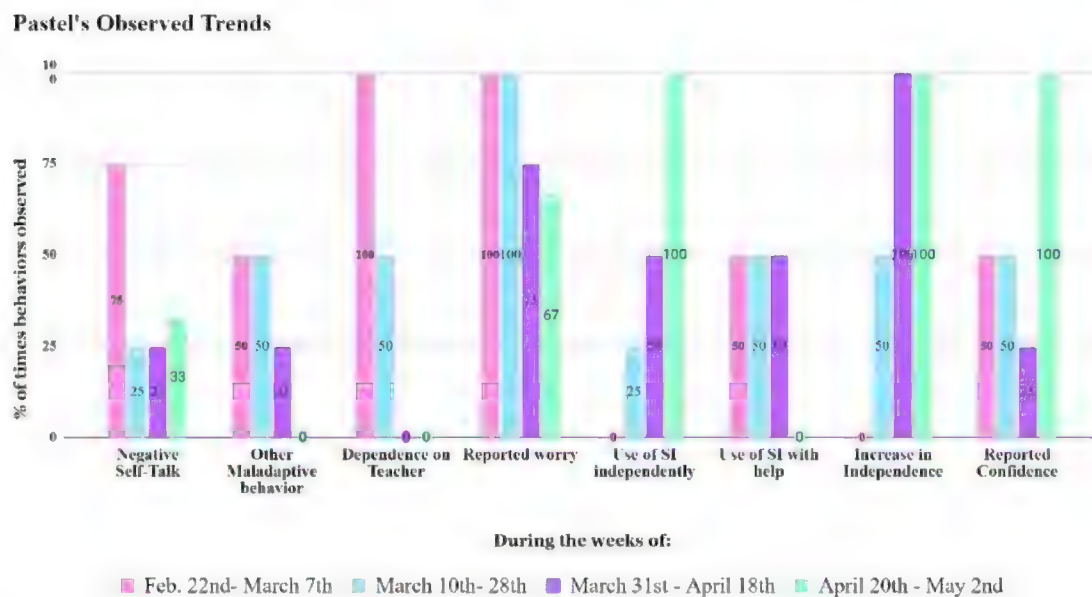
*Figure 67.* Triangles artworks that included materials the student had often avoided.

Triangle reported feeling more experimental and open to change in his work as a result of SI, his language was more carefully used, and was less self-deprecating in language, though I was never able to convince him to stop using the phrase 'not bad' to describe something positive. I had worried that this phrase could be thought about as a



step up from 'bad' but the student continued to use the phrase and seems to have kept it as a positive description that is not related to negative self-talk as I had worried it was earlier in the study. Overall, Triangle reported a very positive and hopeful experience using the SI technique, making great gains in self-confidence during the study.

**Understanding Pastel's Experience.** Pastel, similar to Raptor, had a few barriers arise during the course of the study which kept her from consistent training at times. These barriers were mostly attributed to student absence or reported feelings of being unwell while attempting to work. Unlike Raptor, however, this student really wanted to participate fully, and I was able to work with her and her family to make up for lost time during the study. Pastel's eagerness to give this work a chance kept her motivated to continue to make progress toward a more positive artmaking experience. Observed Trends of behaviors in Pastel's experience during the student can be seen in *figure 68*.



*Figure 68.* Pastel: Observed Trends.

As we saw earlier and can see again in *figure 69* Pastel did not immediately take to the idea of SI, and thought it was odd, it took a little while for her to see what we were trying

to do but once she understood she worked hard to use the technique to see if it would help her feel more confident. She described how this felt for her during our final interview, saying:

**Pastel:** At first when we were doing this technique it was a little weird. Little weird.

**Teacher:** I agree.

**Pastel:** Especially the part – especially the part – and you’re like watch me talk to myself. That was weird.

**Teacher:** Yeah. It is a little strange. To do that.

**Pastel:** But now I’m a little more comfortable. Now I’m a little more comfortable, because we’ve been doing this for months. A little more comfortable because I understand the process. Before I was just confused and new to this. I didn’t understand how we would do this process. But now that I know we say kind things to ourselves to make ourselves feel better and our – for if we mess up, which you can’t really mess up in art. But if we think we mess up, we use them to stay calm and think (Pastel, personal communication, Final Interview May 12th, 2022).

Once she became more comfortable, Pastel reported that this descriptive way of talking and the addition of kind words were helpful to make her feel better during times of stress. It also showed a change in thinking patterns around a phrase that would have been considered negative self-talk for this student. In this instant, she was using the phrase *messed up*, and de-validated it as an authentic or descriptive answer, by explaining that you ‘*can’t really mess up*’ in art-making she was demonstrating one way that she was thinking about and reevaluating the way she was thinking and describing the experiences that gave her more power over her own reactions.

## Pastel Participation in SI and Observed Changes in Confidence

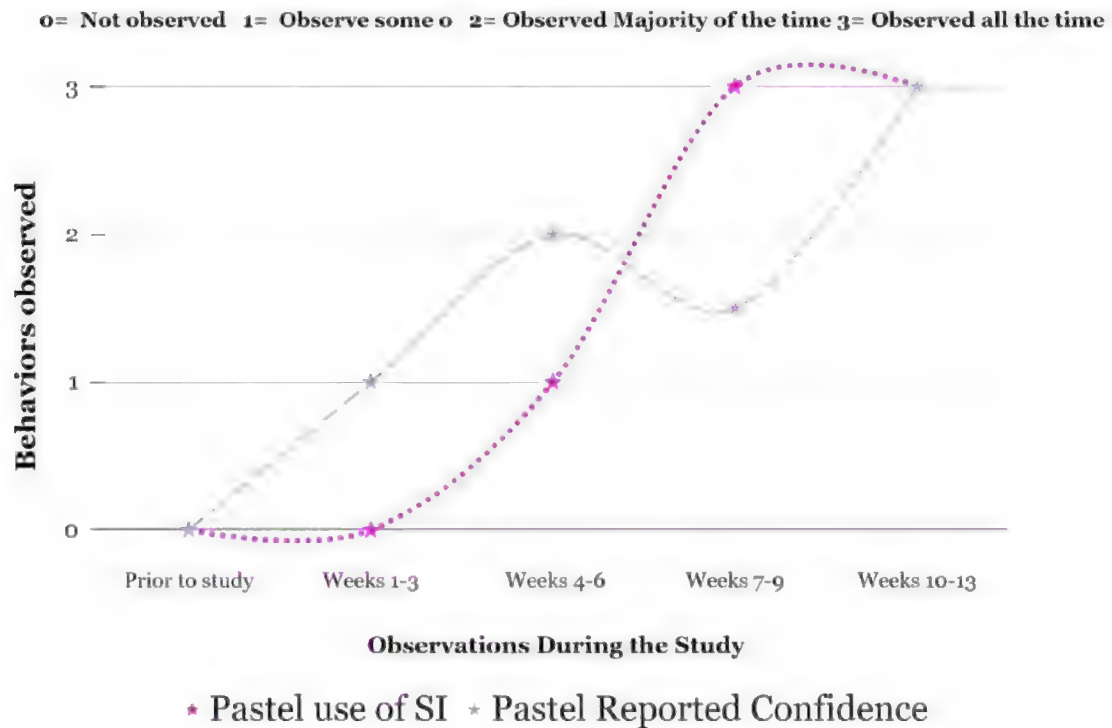


Figure 69. Pastel: Observed Changes in Confidence and use of SI.

Eventually, the use of SI did show improvements in Pastel's confidence. Overall her trends in confidence compared to SI use rose as can be seen in *figure 69*. Pastel's independence in class, which is charted in *figure 70* and the comparison between the students' confidence levels and use of negative self-talk were all connected. Pastel did have moments during the study where her effective use of SI momentarily declined, confidence dipped or negative self-talk rose in response to missed classes and other unexpected factors.



### Pastel Participation in SI and Observed Changes in Behavior and Independence

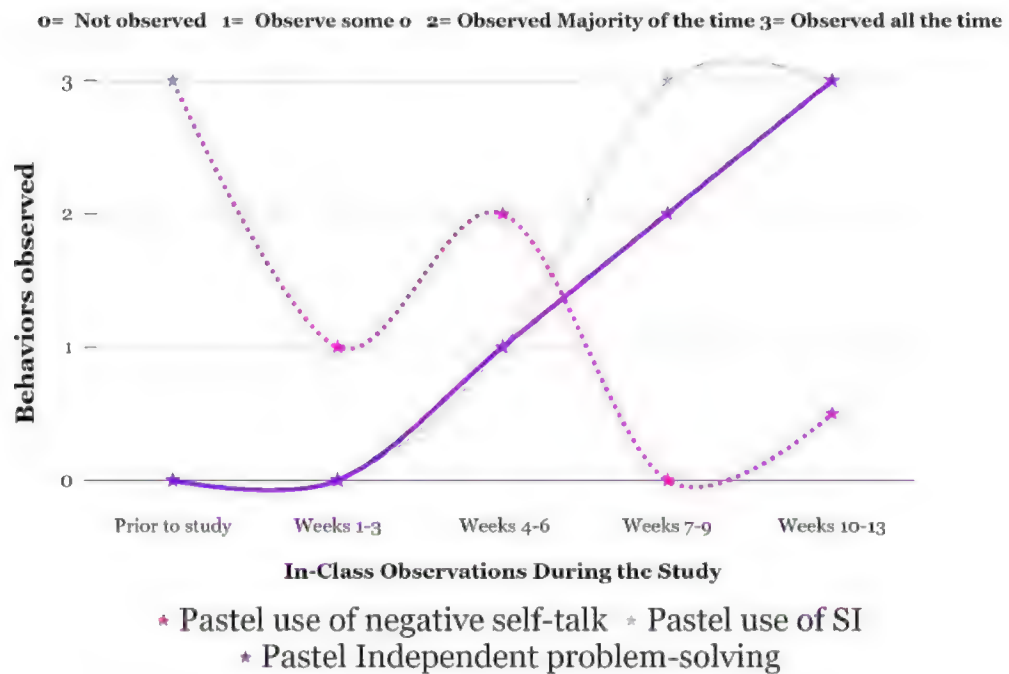


Figure 70. Pastel: Observed Changes in Behaviors and Independence while using SI.

### Pastel Participation in SI and Observed Changes in Confidence and Negative Self-talk

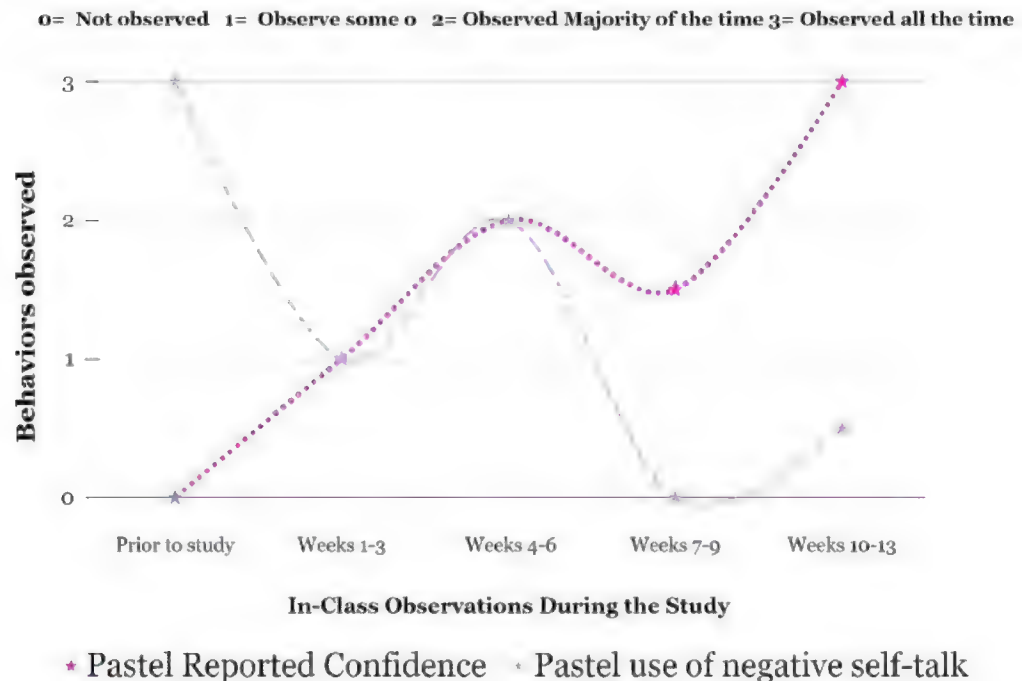


Figure 71. Pastel: Observed Changes Negative Self-talk and Confidence during the study.

Pastel's data proved a connection between the use of SI and the feeling of confidence. We can see that Pastel's confidence levels only began to rise as she started to use SI more often. We can also see how negative self-talk connected to her feelings of confidence. There was a point early in the study where this participant was absent for two training sessions in a row, which caused her to forget how to use SI independently and her use of negative self-talk rose slightly for a time affecting her confidence level for a week during the session. It was also noted that the student's confidence was also affected by their physical well-being. The other participants in the study felt physically well during all of our sessions. Pastel, however, felt ill a few times during the end of the study. This seemed to be reflected in her overall feelings of confidence at the end of our sessions where the student reported some more feelings of worry during these sessions.

Pastel's participation during those times shows the connection between physical well-being and confidence which is also an important factor to realize in the classroom. It is not as easy for students to learn or feel motivated to work through challenges when they are unwell as Pastel's data suggest. Despite the dips in confidence, Pastel still showed a great deal of success utilizing this technique. Before beginning the study this student showed little to no independence in class the majority of the time, and her use of negative-self talk was continuous and damaging to her ability to feel successful in class. It is evident that Pastel still felt inclined to use negative self-talk, particularly when she was feeling unwell. When she was consistent and used SI to help her work through her thinking patterns, as we saw in *Chapter IV*, this student's ability to work and problem solve in the classroom changed dramatically from the beginning of the study. The general use of positive, or just simply authentic, fact-based language while working was a big

shift in the student's atmosphere and had an effect on her ability to work independently and maintain a positive mindset.

### ***Summary of the Results of Student's SI Use***

The findings of this study found that participants who learned and consistently practiced using positive self-statements and worked toward eliminating the use of negative self-talk when working were able to overcome some of the self-doubts they experienced in the classroom. Looking at the comparative data (*figures 54, 72, 74, and 75*) between the three students who learned SI as an intervention strategy, it is clear to see the similarities in experiences. As seen in *figure 72*, all students who used SI consistently also used less negative self-talk over time to describe themselves, their art, and their ability to create art.

Pastel was the only participant whose use of negative self-talk rose after the beginning of the study, however, this lined up with instances the weeks before where the student had been absent for two training sessions in a row see *figure 73*, or *Appendix D* for more attendance information. After completing the next training session and receiving a more thorough review of how to use SI, Pastels results showed a decrease again, negative self-talk was also observed to be used on Pastels last session in which she was very noticeably feeling unwell. Pastel seemed to have a harder time controlling her thought process when feeling unwell. The other two participants showed a steady decline in negative self-talk, Triangle showing the most dramatic shift as he quickly began to use self-instruction and worked to eliminate these unhelpful thoughts.

## Student Participation in SI and Observed Changes in Negative Self-Talk

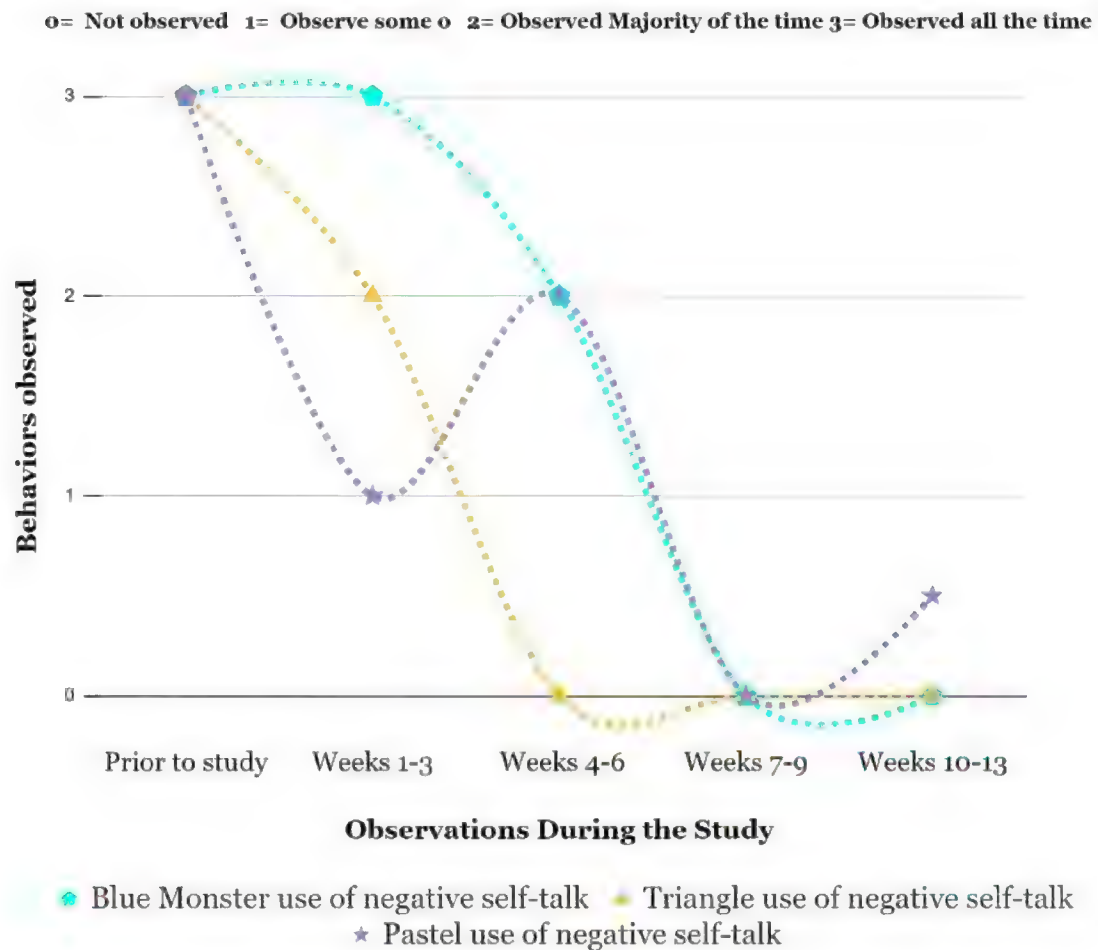


Figure 72. Observed Changes in Negative Self-Talk while Practicing SI.

Session #	Pastel Missed SI Training Sessions
3	Student Absent 3/14 Student Absent 3/21 Session 3 resumed 3/28, Review needed

Figure 73. Pastel missed trainings that affected weeks 4-6 results.

## Student Participation in SI and Observed Changes in Independence

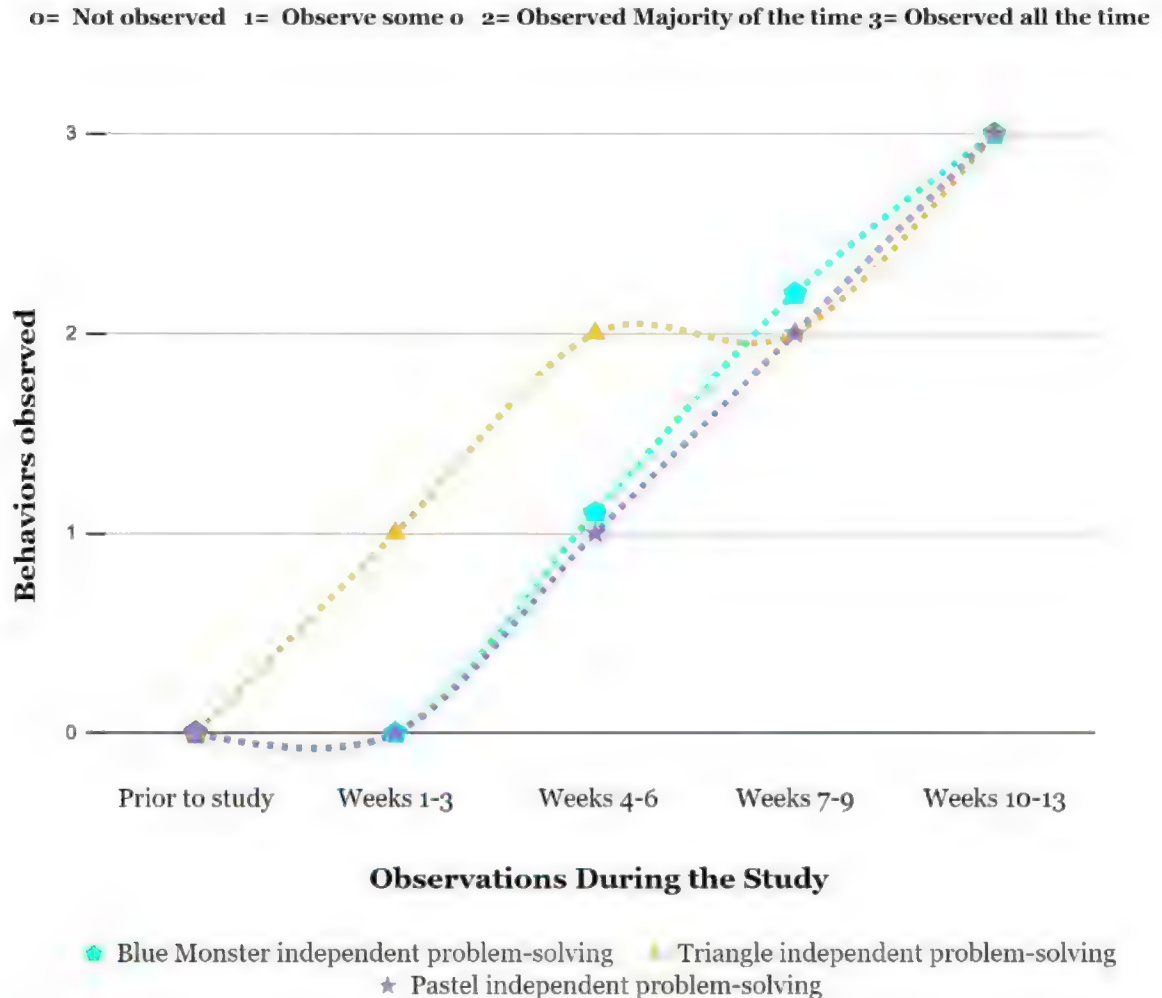


Figure 74. Students Observed Changes in Independence while Practicing SI.

All three participants saw positive shifts in independence in class and SI use as the study continued. This was noticed in students' ability to work through ideas on their own, begin working without excessive prompting, and observed changes in student dependency on the teacher or other students to help them get started. These trends are noted in *figure 74* with *figure 75* showing student-reported changes or expressions of confidence over time.

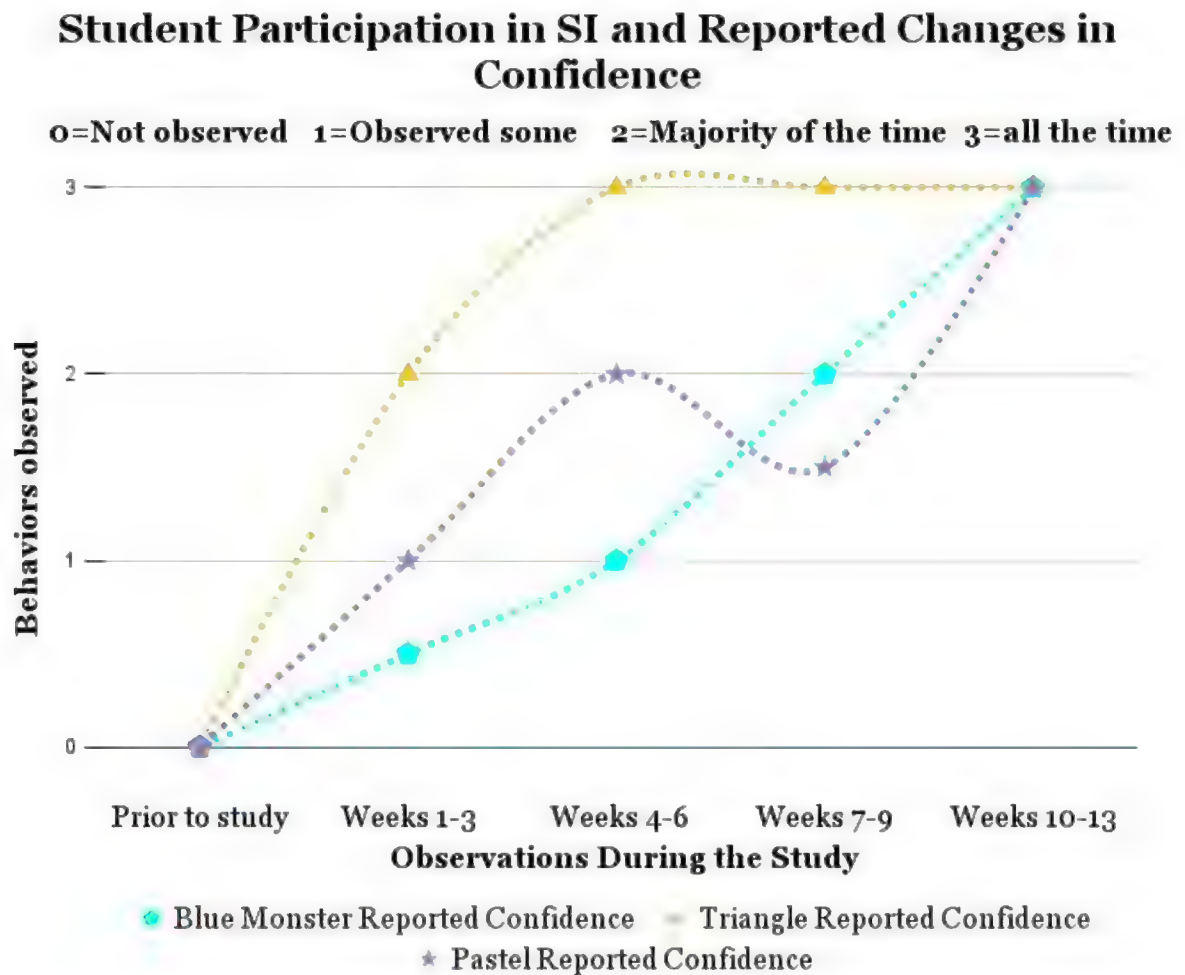


Figure 75. Student's Reported Changes in Confidence while Practicing SI

Referring back to *figure 54* which showed each student's engagement with SI, and seeing the similar trends among students who did participate in utilizing the technique over time, we can see that there are parallels between the data taken. Data in this study would suggest that the use of an intervention that focuses on language use, thought patterns, and negativity can be used to address students' expressions of self-doubt, reticence, and low self-esteem in the classroom. There was a strong connection seen in students' use of SI, which was the chosen intervention of this study, and their use of

negative language. This language use is again connected as well to observances of independence or dependence as well as students' reported confidence. The one participant in the study who did not use SI never eliminated his use of self-talk in observances (*figure 56*); this use was inconsistent as were his reports of confidence over time. This student's independence in class did become a little more prevalent as the teacher was able to spend more time with them and strengthen their rapport, showing that students' feelings of being valued and cared about in the classroom is also important and can help students work toward independence. If time was available to restart the study for this student with more consistency, I would have hoped to see this student's feelings of confidence in his abilities grow as well as it had for my other participants.

## **Presentation of Findings**

### ***In the Context of the Research Question***

This research study illustrates the connections between the use of language and feelings of self-esteem. When students utilized an intervention targeted at the use of language that steered the user into using authentic language about their abilities and what they created, higher levels of student self-confidence were reported over time as seen in *figures 72, 74, and 75*. Negative language about self decreased and left users talking more authentically about their art-making experience which in turn decreased observation of reticence among students. The creation of self-statements served as initial structures for students to help change their language use when starting an artwork and allowed for initial motivation and could be used again as calming reminders to think carefully and move into problem solving modes when errors occurred. Some of the students' written self-statements can be seen below in *figure 76* where they are charted by some identified



themes. For more examples of student self-statements, and their comparisons to each other please see *Appendix D*.

**Some of the Students Self-Statements,  
Themes/ categories**

Color Coded by contributor: Blue monster, Triangle, Pastel

Motivational Phrases	Reflecting/ reminders of what you are doing	Reassurances When errors are made	Perseverance
** Easy Money - spoken	This is what I can do....	I will finish and change things later.	I will finish and change things later.
I can do this.	I can focus on something certain.	I can fix this.	I can do this.
Never stop trying.	I will start off by...	It's okay to mess up.	Never turn yourself down.
Work hard and don't stop.	Think about what you do before you start.	It's never too late to change something.	Focus on one thing at a time.
I believe in myself.	I will get through this!!!	There is no such thing as bad.	Never give up.
I will do great.		I believe in myself.	I will find a way to change my mistakes.
I can do this!!		I will get through this!!!	I will not give up!!

Figure 76. Student self-statement examples, coded by themes.

The use of these self-statements was only the beginning of the process of using SI; self-instruction helped students identify unhelpful thought processes and work toward changing them. The process emphasized narrative scripting of what students were doing that helped students to focus and was reported as being calming to students. Using the process of error scripting described in *figures 6 and 15*, was used as an intervention that helped students use self-statements to further problem solve and become more self-reliant in the classroom. The study also proved a link between negative self-talk, students' experiences of confidence, and the utilization of SI. The one student in the study who did not learn how to use SI effectively showed signs of positive behavior and independent



work in class which was supported by a strengthened bond with the teacher, but he did not show significant changes in his confidence level or use of maladaptive behaviors such as negative self-talk. Allowing us to make conclusions that language, specifically the way we speak about ourselves and our ability affects our self-confidence and experiences of doubt regarding abilities. The changes in student confidence and independence in class by the three students who did learn to utilize the technique were notable and consistent as was seen in *figures 74 and 75*. As students' negative language was addressed and slowly changed, students reported confidence increased and dependency on the teacher for emotional support decreased over time. This research shows that elementary art educators and their students could benefit from instituting interventions like SI training to help students become aware of their use of language and to actively change it in order to help them feel successful and promote problem solving behaviors.

### ***In the Context of the Literature***

Based on the experiences of all my students in the study, elementary art educators can help students reach higher levels of independence in the classroom, by working to build and strengthen relationships between the teacher and student. All students in the study, regardless of whether or not they successfully used the technique I attempted to train them in, showed improved performance in class regarding independence. This observation supports the works and ideas of Byron (2018), Hammond (2015), Minahan (2019), and Souers (2016), and their arguments on the necessity of a safe caring classroom environment in order to promote independent learning behaviors.

All of these authors named a variety of ways to help promote a safe environment, but all commonly suggested that strong rapport between students and teachers helps

create space for educational challenge and independent learning in the classroom (Byron 2018, Hammond 2015, Minahan, 2019, and Souers, 2016). My research supports this claim as I was able to strengthen my relationships with all the participating students in the study. Even though not all students had the ability to learn the intervention process I was attempting to teach, all students did show positive changes in class, which resulted in students' ability to work more to be more willing to take educated risks and, in turn, work more independently in class.

The importance of language use or, more specifically, self-talk, which was explicitly studied and reported on by Mechinbaum (1975) and his various associates, as well as Farber (1963), and Neck and Manz (1992), was also made apparent in the results of this study. These authors all wrote or studied how self-talk influences the brain, learning, and experiences of successful performance of individuals. Specifically, they presented the idea that the use of negative language when talking about yourself, or hearing similar language about yourself from others would create environments where people feel less capable or productive (Farber, 1963, Mechinbaum, 1975, and Neck & Manz, 1992). The data gathered in this study support these findings as well. As students who learned the self-instruction technique and constantly used it, resulted in decreased use of negative self-talk. As this change in language occurred positive trends in students' independence in the classroom were reported and feelings of confidence occurred. A decrease in maladaptive behaviors and teacher dependence was also observed. Students reported feeling less negative and their willingness to experiment and work through challenges rose as a result of this technique for changing negative self-talk.

The use of SI in particular as an intervention was important as it did not only address the negative beliefs students had, but it actively helped to make them acknowledge and attempt to change these ideas. Part of this technique of changing the way we speak and think about ourselves required a narrative approach to recognizing current working and thinking by continuously talking through decisions that were being made. This continuous scripting was especially important when students became frustrated or made mistakes or errors in their work.

SI calls for authentic language without judgment; no student utilizing SI could get away with saying *this is ugly* or *just bad*. These descriptions rely too heavily on opinion instead of fact, students were challenged to stay away from negative opinions and self-talk and to only use ‘helpful’ language to describe what they experience. Using an error scripting process focusing on authentic use of language and possible explorations of materials to change what is disliked by the maker, leads to the strengthening of problem solving behavior supported by the ideas presented by Farber (Farber, 1963). Looking back at *figure 4*, which explains how thought patterns influence problem-solving behaviors, it is easy to theorize how negative self-talk could lead to ineffective problem solving. This breakdown also describes how more thoughtful approaches to working would naturally lead to more effective problem solving, which was seen as students successfully began using error scripting independently as we noticed in *figures 23*, and *34* (Farber, 1963).

The literature, particularly that pertaining to Mechinbaum’s theory of self-instruction technique, which was a dated theory, and strategy, was still found to be helpful in guiding students into more careful thinking patterns and promoted the use of

more authentic language for my participants who implemented the strategy. This suggests that the technique of SI is still a useful strategy that can be used and adapted to other areas as this researcher adapted its use to be helpful in the art classroom.

***In the Context of the Research Environment.***

Participation in the study was very limited, strict eligibility requirements were set forth by the teacher-researcher, and started with a small pool of students in which four student guardians allowed participation in the study. All of these students were from the same community, three of the four identified as male, and three were within the same grade level. The demographics of this study were very limited due to these initial requirements, and the responses received back from guardians show a limited demographic of my larger school environment in itself.

All of these limitations in demographics kept me from further exploring variations of experiences of a more diverse community. I would have liked to have included more participants in my school environment of varying races, ethnicities, genders, and ages in this study, however, the specific eligibility pool and responses of parents limited my ability to widen this specific study. This study can only be reflective of the demographics of the students involved in my study, and their classmates during the 2021-2022 school year. I was also limited in the time in which I had to work with students, which caused complications when trying to teach one particular student as barriers in scheduling or interruptions during the day resulted in his lack of ability to fully learn the intended intervention. I plan to try and reimplement this intervention next year for this student if possible.

As part of this study, a more generalized teaching of self-instruction created by the researcher was implemented in the elementary art program school-wide. The researcher began using similar language and techniques for helping students work through challenges and problem-solving in all classes as a way to assist participants in generalizing their learned skills and a way to normalize these word choices and expectations on students. I did not take specific data on these whole class teachings, but this research did change the way the teacher-researcher responded to questioning and assisted students when frustration and other behavioral concerns arose in the classroom. This research again is only reflective of this participant group and demographics during the 2021-2022 school year; it can not claim to be a conclusive account of what all students of elementary age experiencing self-doubt would experience when implementing a program that addressed student language in the classroom such as self-instruction training.

***In the Context of the Researcher as Self and Practitioner.***

The study overall brought validation and clarity to my teaching practice. Having had a lot of personal experience with self-doubt that I concluded had surfaced from negative self-talk and negative interactions with teachers, I had practiced careful phrasing and word choice when working with students. However I never knew for sure if the emphasis I was trying to put on students' use of language in the classroom was actually useful. I also did not have a clear understanding or plan in which to help share this information or make it specific enough to be used as part of a teaching strategy. This research proved that language use is significant in students' ability to preserve and find confidence in their ability to create. This strategy was utilized by the researcher during

the study to help combat internalized negative thought patterns, 'all or nothing' thinking, anxiety over the thesis writing process, doubts about teaching ability, and while creating artwork. The practice of carefully separating opinions from fact, and practicing descriptive thinking promoted both participant's and the researcher's problem-solving behaviors.

On a more relational topic, the study naturally increased my rapport with student participants. The additional time to meet with and interact with students, as well as the chance to help them to think through their thoughts on a consistent basis gave me better insight into their thought processes. Both our informal and more formalized conversations were always student-centered, which let students know that I valued their thoughts and opinions, creating a safe environment that may have helped contribute to their increased displays of independence throughout the study.

### **Implications for the Field**

#### ***Significance of the Findings.***

Data collected in this study showed that students can significantly benefit from teaching strategies that promote careful thinking rooted in fact and narrative accounts. The narrative qualities of the strategy utilized were beneficial in helping students maintain a mindful thought process and promoted independent thinking and problem solving, which is particularly helpful for students who regularly express feelings of self-doubt and low self-esteem. These feelings create barriers to student learning and growth and could lead to student engagement problems and closed-off thinking patterns that could harm student relationships with teachers, students, and even the content area of the arts in general. The use of this strategy with elementary-aged children can be

beneficial in preventing negative self-talk and thinking patterns before they become internalized.

Using carefully considered, and descriptive language to talk through problem solving tasks and discomfort benefited my student participants by helping them create a plan and continuously revise it. This process was also reported as helpful, as students often reflected, it promoted student focus and reassurance as they worked, making mistakes feel less powerful for students. Teachers would also benefit from these findings as they show the need for care in word choices and this framework provides assistance in helping art teachers frame questions that help students solve their own problems without taking away their independence and pride in solving their own problems through successful productive struggle. Over time the successful practice of these strategies may lead to more engagement in the classroom and promote individual student goals. This study shows the significance of language and the creation of positive, non-judgemental self-statements and sentence structures that can be modified and repeated as a tool for students to manage their feelings during the creative process.

### ***Implications of the Findings***

The findings of the study show that art educators can promote student independence and self-confidence while making art by teaching students to use descriptive, non-judgemental language in order to promote independent problem-solving and a positive mindset. Providing students who experience self-doubt and use negative language toward themselves with a way to evaluate their thinking can help students learn to think more authentically about their abilities. Self-instruction offers students a chance to think about their word use and actively change it. The addition of small ungraded, and

open-ended art activities can help students practice this process. Creating open-ended prompts allows students more freedom to experiment and discover more about their own preferences while creating. The use of error scripting in this technique can further promote students' growth and independence by equipping students to evaluate with the skills needed to, create a plan and consider its successes, and possible challenges before beginning the process over again. For students to become independent learners they need to have the chance to experiment and create their own solutions to challenges that arise in life.

### **Implications for Further Research**

#### ***Next steps - Questions for consideration***

Due to the limitations in demographics and the normal lack of availability of students to typically meet with teachers in the school schedule, many questions have emerged as a result of the study. To begin, future researchers may consider investigating the impact of self-instruction training on a wider group of individuals of different races, ethnicities, genders, and ages. How would SI training be accepted or dismissed by a more diverse or larger participant pool? It may be interesting to consider how SI training would affect students who already feel confident in their abilities, or who feel neutral about or are uninterested in artmaking processes and activities.

One student in this study was multilingual, however, she was not considered an English Language Learner, as she had dual proficiencies. Considering English Language Learners, as they are learning a new language, how might this technique translate for students? Would simple sentence frames translated into students' primary language and English be enough to communicate this strategy with students effectively? This is a



particularly important consideration when thinking about younger students who have not reached reading proficiency in any language yet.

I question how this technique can be best implemented in a larger class setting now that I have evidence that this strategy can be very effective for students' personal growth. It is unlikely that I or most educators will have the ability to pull students out of class for private training in the future. I wonder if more generalized or class-created self-statements following the ideas of SI would be as effective as personally created self-statements in helping students' confidence and independence over time. Students are also unlikely to be able to participate in SI training as strictly as my participants, or be able to complete the initial practice phases out loud. The large class sizes would make it hard for students to be able to concentrate and students would be more likely to be embarrassed if rehearsing out loud in a full classroom setting. Would rehearsal using just covertly or whisper speaking only, be as helpful to students as the full process was to my participants?

I created a generalized scripted error reporting sentence structure to use with all of my students during the study. Was this script actually effective as a problem-solving strategy for all students with or without SI training? My hope and expectation are that it was helpful for both groups, but I do not have actual data or evidence to prove this beyond my student participants who had private training. A final thought to consider is how well this training will be retained over time, and what supports could be added to help students retain this skill set and further generalize these ideas into their lives.

## Conclusion

The study yielded positive results regarding student independence and reported feelings of confidence in art-making among elementary-aged students with histories of learner dependence and self-doubt in the art classroom. These results were collected by analyzing observational and self-reported data gathered on participants in the study after piloting a training program created by the teacher-researcher. This training utilized the ideas of a coping strategy developed by Donald Meichenbaum(1975), called self-instruction training, or SI (1975). Helping students learn to identify the importance of language in their ability to feel successful and work through problems on their own ultimately helped all participants who attempted to practice the strategies. Changes were seen in all three students' use of language. Specifically, the use of negative self-talk decreased over time as students became more independent using SI strategies. Language became less negative as students reported and were observed displaying higher levels of confidence and independence while creating art.

One of the four participants did not actively engage in the use of this training strategy, and no conclusion on whether this student could benefit from this intervention was made. This participant's data, though incomplete, did show some positive correlations between students' ability to work independently and use less attention-seeking behaviors in class after having the chance to interact with the teacher more independently, outside of the class setting. This students' use of maladaptive behaviors and experiences of confidence did not change in a significant way during the study, and SI was never utilized independently by this student. The trend in changed behavior over time supported other aspects discussed in my literature review regarding

the creation of safety and building of positive rapport between student and teacher.

Having met with the student outside of class gave this student the individual attention he sought in class through exhibiting disruptive attention-seeking behaviors. Though his confidence levels, unfortunately, did not improve, this student did begin to work toward more independent decision-making.

Furthermore, the study was overall beneficial to the participants, the general classroom population, and the researcher alike. The study strengthened my rapport with all of my students and taught me a way to guide and help students to problem solve more independently. My rapport with student participants, in particular, was greatly strengthened during the study, and students' levels of comfort in my classroom seemed to increase, resulting in students' willingness to experiment and explore more independently.

Mechinbaum's (1975), self-instruction training gave me a framework to help students, and myself, think more carefully about the power of our words to dictate feelings of success or failure in life and use that power to help make thoughtful choices. Using his framework to help students think more carefully helped me learn more about my students and myself. SI helped my students to be more productive, open to experimentation and demonstrate higher levels of perseverance, and positivity in the classroom setting.

As I conclude these last thoughts, I reflect on my time during the study as a teacher-researcher, and as always, my students are at the front of my mind. This work was inspired by sheer concern for my student's personal well-being after experiencing the sometimes extreme reactions, and negativity of students whom I watched, listened to, and ineffectively tried to help manage their own deeply personal and painful reactions to

self-doubt, and perceived mistakes. In my small sample size, the use of SI, for those who used it, created a profound change in how students interacted with language and perceived challenges. It is my deep hope that these students will continue to employ these learned strategies and keep from falling back into the harmful maladaptive habits seen before the study began.

The pride and genuine gratitude I have toward all of my student participants for helping me to better understand how to support all students' independent thinking can never be concisely summed up. Now, in the spirit of one of my participants, Pastel, who ended every audio-recorded SI training session by saying something along the lines of: 'You can put that on the record, I am finished talking now. Goodbye!' I leave you now with my hopes that this study has helped you reflect on language, and how it connects to the development of independent learners. As Pastel might have said, you can add this to your own personal record; remember that language has power. Thank you for your time; I am finished for today; goodbye for now.

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**APPENDIX A: Letters of Consent & Permissions****MA Thesis Consent Forms****Research Site Consent Form**

[REDACTED] Elementary School  
[REDACTED]

\_\_\_\_\_, 2022

To Whom It May Concern:

I, \_\_\_\_\_, give permission to Tara Drissel to conduct an action research study at [REDACTED] Elementary School during the spring 2022 semester in order to fulfill the requirements of their Master's thesis at Moore College of Art and Design. I understand that this project is intended to research the implementation of an individualized, self-reflective strategy in the art room for recognizing and renegotiating negative internal dialogues. Changes in participants' perceptions of competence or self-confidence, as well as changes in observed behaviors, will be explored through the creation and rehearsal of participant-created, replacement dialogs. The strategy will be supported and rehearsed through the use of artmaking opportunities promoting self-reflection and exploration in the elementary art classroom.

I understand that Tara Drissel will be a teacher-researcher who will be teaching art while gathering data during their regularly scheduled art classes and during individual sessions with participants during their preparation period from 2:35-3:15 most school days. I understand they will be collecting data using various methods, including observation, participant interviews, visual artifacts, such as student artworks, created scripts, practice activities, participant reflections, and exit tickets.

Sincerely,

[REDACTED]

Principal

**GUARDIAN RECRUITMENT LETTER**

\_\_\_\_\_, 2022

Dear Parent / Guardian,

I am contacting you to request permission for your child,

---

\_\_\_\_\_, to participate in a research study at [REDACTED] Elementary School. My name is Tara Drissel, and I am a Master's candidate in Art Education with an emphasis in inclusive practices at Moore College of Art & Design. I am conducting my thesis research at [REDACTED], where I will be examining the impact of personal language and thoughts used to describe one's capabilities on students' feelings of competence and confidence within the art room. An individualized, self-reflective strategy for recognizing and attempting to change negative self-dialogues will be taught and practiced to look for positive changes in students' feelings of competence and self-confidence. You are invited to reach out to me to ask questions following the review of the attached materials.

The research will be conducted at [REDACTED] Elementary School during the school day during students' regularly scheduled art class and during individual sessions lasting fifteen to twenty minutes once a week, for a total of nine to ten weeks. Individual sessions will take place during the end of the day before the beginning of dismissal and will strive to have minimal impact on the time devoted to other academic subjects; care will be taken in scheduling to avoid disruption of any therapies that may be conducted at the very end of the day. If the timing of weekly individual sessions is of concern to you, the possibility of meeting briefly before or after school can be discussed as needed. Please let me know if you would like to discuss this possibility; I will make accommodations if possible. Your child's identity will be kept confidential, pseudonyms will be used on all data collected, and any information regarding students' identity will be concealed to maintain privacy. The research study will begin midway through February and end at the beginning of May. Students will participate in regularly scheduled art classes and brief individual discussion and art-making sessions for 15-30 minutes per session once a week. Individual sessions may be audio recorded to assure accurate

observations throughout the study. All students will have the opportunity to engage in drawing activities in class and during weekly sessions. During weekly sessions, all students will reflect on, build and begin practicing using self-created positive scripts to be utilized during the artmaking process when feelings of self-doubt occur. Again, students may have audio or video recorded during the study if permission is granted. No photographs of your child will be taken. Student artwork and other handmade materials will be photographed. All audio and digital data will be destroyed upon the conclusion of the thesis.

Attached you will find CONSENT, PERMISSION SLIP, RESEARCH DESCRIPTION, and PARTICIPANT'S RIGHTS forms which further detail the research study. Should you have any questions at all, please do not hesitate to contact me at [REDACTED] or [REDACTED]. If you have no further questions, you may now sign and return these forms.

You will have additional time to consider your child's participation with a deadline of \_\_\_\_\_, 2022. Thank you for your time and consideration in this matter.

Tara Drissel

**PERMISSION SLIP**

\_\_\_\_\_, 2022

Dear Parent/Guardian,

I am contacting you to request permission for your child, \_\_\_\_\_, to participate in a special project at [REDACTED] Elementary School. Tara Drissel, a Master's student at Moore College of Art and Design, is conducting a research project examining the use of language in students' formation of confidence and belief about their abilities in the elementary art classroom. Ms. Drissel is the current art teacher at [REDACTED] [REDACTED] Elementary School. This project will be conducted both in-class, during students' regularly scheduled art class, and during individual student sessions once a week during the last 15 to 30 minutes of the school day. If needed, individual sessions may be able to be scheduled during an alternative time if necessary. Please let Ms. Drissel know as soon as possible if you would like to attempt to negotiate an alternative time frame for these weekly sessions. The results of the study will not in any way affect your child's grades or progress in art class. Students' identities will be kept anonymous throughout the study.

The intent of this project is to help students recognize and work on changing the language used to talk about their abilities in the art room. This will involve a weekly individual session allowing students the time and privacy to explore beliefs about their abilities through the use of a semi-formal interview and short self-assessments. Students will receive support in creating and implementing new dialogs through a self-directed technique for changing negative thought patterns. This technique will be rehearsed during most individual sessions by completing small works of art. The artmaking prompts given in individual sessions will be repeated as a warm-up activity in regularly scheduled art classes for all students to respond. Individual sessions may be audio recorded for the purpose of creating accurate field notes. Artwork and other artifacts may be photographed throughout the study.

Should you have any questions, please do not hesitate to contact Lauren Stichter at (215) 965-6811 or [lstichter@moore.edu](mailto:lstichter@moore.edu). **Should you wish for your child to**

participate, please sign and return this form to your student's homeroom teacher no later than \_\_\_\_\_, 2022. Thank you for your time and consideration in this matter.

-----PLE  
ASE DETACH FROM MATERIALS AND RETURN TO STUDENTS  
HOMEROOM TEACHER, OR ELECTRONICALLY TO MS. DRISSEL, NO  
LATER THAN \_\_\_\_\_, 2022.

I, \_\_\_\_\_ (Parent/Guardian Name) do hereby give  
permission for my child, \_\_\_\_\_ to participate in a  
special project at [REDACTED] Elementary School.

\_\_\_\_\_  
Parent / Guardian Signature

\_\_\_\_\_  
Date

**PARENTAL CONSENT FORM FOR PARTICIPATION IN RESEARCH**

I give consent for my child \_\_\_\_\_ to participate in the research study entitled, “Addressing Confidence in Elementary Art by Modifying Language We Use About Abilities ,” that is being conducted by Tara Drissel, a Graduate Student in Art Education at Moore College of Art & Design. I understand that this participation is entirely voluntary; my child or I can withdraw consent at any time without penalty, and have the results of the participation, to the extent that it can be identified as my child’s, returned to me, removed from the records, or destroyed.

1. The reason for the study is to examine the implementation of a technique that uses student-created statements to reduce the use of negative language and experience of self-doubt in the elementary art room. Development of confidence and more authentic views of one's abilities will be closely monitored for changes in perception.
2. The procedures are as follows: Students will participate in a weekly individual art session during the last 15 to 30 minutes of the school day (unless otherwise negotiated) between February 14th through May 6th. Students will complete self-assessments pertaining to their feelings of confidence and capabilities before and during the production of artwork. These reflections will be discussed to look for negative or dismissive use of language towards oneself. New scripts will be created to refute negative thinking; scripts will be rehearsed during short artmaking activities. These activities will be repeated in the regular art class with all students to promote the generalization of this technique. Students will be informally observed, and data will be collected regularly. Students will be given a semi-formal interview, or independent reflection activity two to three times during the study, one of which will be at the end of the study.
3. The timeline for the research is as follows:
  - Late January to early February: Gain Permissions
  - Early February: Finalize plans and materials

- Week of Feb. 14th through the week of May 1st: Conduct study/gather data
4. No risks are foreseen. My child's participation is voluntary. Non-participating students will not be penalized in any way. Grades will not be affected if a student elects not to participate.
  5. Participants' identities are strictly confidential. Results will not be personally identifiable. Data collected from the research will be securely kept off-site. Pseudonyms will be used when quotes from individual children are transcribed into data.
  6. If there are further questions now or during the research, I can be reached at [REDACTED] AND [REDACTED], or [REDACTED].
  7. If you have any further questions, you may also reach out to my professor, Amanda Newman-Godfrey at [anewmangodfrey@moore.edu](mailto:anewmangodfrey@moore.edu), or my MA Program Director, Lauren Stichter, at [lstichter@moore.edu](mailto:lstichter@moore.edu).

Please sign both copies of this form and return one to the student's homeroom teacher, or send an electronic copy to Ms.Drissel. A duplicate will be provided for you.

Signature of Researcher: \_\_\_\_\_

Signature of Parent/Guardian: \_\_\_\_\_

Research at Moore College of Art & Design that involves human participants is overseen by the Institutional Review Board. Questions regarding your rights as a participant should be addressed to:

Lauren Stichter

Moore College of Art & Design

20th and the Parkway, Phila., PA 19103

215 – 965 – 6811

[lstichter@moore.edu](mailto:lstichter@moore.edu)

**INFORMED CONSENT FOR STUDENTS**

**DESCRIPTION OF THE RESEARCH:** Your child is invited to participate in a research study that examines the implementation of a technique that uses student-created statements to reduce the use of negative language and experience of self-doubt in the elementary art room. Development of confidence and authentic views of one's abilities will be closely monitored for changes in perception throughout the study. It is hoped valuable information on how to best structure art education for elementary students, particularly those experiencing self-doubt or lack of confidence in their abilities, will be revealed throughout the course of this research study. For this study, your child will participate in research sessions once or twice a week, beginning mid-February and concluding at the beginning of May. These sessions are extra opportunities to engage with and possibly, reflect upon and make art beyond your child's existing art class. Participation could minimally impact the regular school schedule, as individual sessions are scheduled to be conducted once a week during the last fifteen to thirty minutes of the school day. It may be possible to negotiate another time for weekly individual sessions before or after school. If this is a concern, please contact Ms. Drissel as soon as possible if you would like to try and negotiate alternative timing. Participation will not impact any scheduled therapies or programming; care will be taken to schedule meetings outside of these time frames. During individual research sessions, students may be recorded. These audio recordings will provide information that I will use in writing my thesis and will be used to maintain accurate data and records. All recordings will be destroyed upon the completion of my study. This study will take place at [REDACTED] Elementary School in



the art classroom designated for the study, and I, Tara Drissel, will conduct the research study.

RISKS AND BENEFITS: Participation in the study is entirely voluntary. There will be no effect on your child's standing or grades should you or your child decide not to participate in this study. The dialogues around artworks and the art-making experiences for the study will be the same for all the students in the study within the regularly scheduled art class. Therefore, your child will not be singled out or pulled out from any activities if you choose not to participate in the study and/or the art-making experiences during class time. Participants will receive individualized support outside of the regular art class to self-reflect more thoroughly and create dialogs to support their independence in the art room. Only students in this study will be receiving direct instruction on this technique. The research has the same amount of risk students will encounter during a usual art or classroom activity. However, your child may be shy, engaging with a new type of activity. If this occurs or if your child feels uncomfortable at any point in this study, special arrangements can be made, and/or you can pull your child out of the study without penalty or repercussions. The benefits from the study include positively affecting students' participation in art in school, both in terms of enhancing their creative expression through a conversation about art and ability, as well as their artistic practice skills through making art. It is hoped that this study will positively affect students' confidence and help students speak more authentically about their abilities. It is also hoped that this study will help me learn more about how to provide a supportive arts learning environment that will influence my art instruction for all students.

PAYMENTS: There will be no payments for you for your child's participation in this study.

DATA STORAGE TO PROTECT CONFIDENTIALITY: The subject's confidentiality will be preserved. I am the sole researcher of this study. For the collation, analysis, and reporting of all data, all participants will be assigned a pseudonym to prevent individuals from being identified. Any charts used in my thesis or presentations will be coded. All the data I collect for this research project will be securely kept off-site, and virtual data will be held securely on my personal computer during the study. Any recordings created will be destroyed upon the completion of my thesis. I will reserve the right to use the data and photographs of student work, but the students' identity will continue to remain confidential.

TIME INVOLVEMENT: Your child's participation in the study will consist of approximately eight to ten individual sessions and any regularly scheduled art class attended between February through the beginning of May.

HOW WILL RESULTS BE USED: The results of the study will be used in drawing conclusions from the investigation on how the implementation of a technique that uses student-created statements to reduce the use of negative language and experience of self-doubt in the elementary art room. Development of confidence and authentic views of one's abilities will be closely monitored for changes in perception. This study will hopefully help identify art activities and sets of language or scripts that may assist future students in managing feelings of frustration that can develop during the creative process. The study will be reported in the form of a thesis, which fulfills partial

requirements for a Master's degree in Art Education with an emphasis in inclusive practices.

I authorize the teacher-researcher, Ms. Tara Drissel, to use the information as outlined above and that any reproduction/publication of this information will be strictly for educational and/or research purposes.

**PARTICIPANT'S RIGHTS FOR STUDENTS**

Principal Investigator: Tara Drissel

- ✓ I have read the Research Description, and I have had the opportunity to contact the researcher with questions about the purposes and procedures regarding this study.
- ✓ My child's participation in research is voluntary. I may refuse to have them participate or withdraw from participation at any time without effect on your child's standing or grades.
- ✓ The researcher may withdraw my child from the research at their professional discretion.
- ✓ If, during the course of the study, significant new information that has been developed becomes available, which may relate to my willingness to allow my child to continue to participate, the investigator will provide this information to me.
- ✓ Any information derived from the research project that personally identifies my child will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- ✓ If at any time I have any questions regarding the research or my child's participation, I can contact the investigator, who will answer my questions. The investigator's phone number is [REDACTED]
- ✓ If at any time I have comments or concerns regarding the conduct of the research or questions about my child's rights as a research subject, I should contact:

Lauren Stichter  
 Moore College of Art & Design  
 20th and the Parkway, Phila., PA 19103  
 (215) 965-6811  
 lstichter@moore.edu

- ✓ I should receive a copy of the Research Description, Consent, Permission Slip, and this Participant's Rights document.
- ✓ If audio recording is part of this research (check one)
  - ☐ I consent to have my child audio recorded.
  - ☐ I do NOT consent to my child being audio recorded.
- ✓ The written, artwork and audio taped materials will be viewed only by the principal investigator and members of the program faculty. Reminder that all participant identities will be kept anonymous.

Written, artwork, and audiotaped materials (check one)

- ☐ May be viewed in an educational setting outside the research.
- ☐ May NOT be viewed in an educational setting outside the research.

My signature means that I agree that my child may participate in this study.

Parent/Guardian signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

Participant's Name: \_\_\_\_\_

## APPENDIX B: Data Collection Protocols

### Observational Journal Protocol

The following form will be used to record observational data about participants during both individual sessions and their typical art cycle lessons during the study. Individual sessions will also be audio recorded to help the teacher-researcher validate and check their observational data for accuracy purposes. No audio recordings will be taken during participants' typical art lessons.

### Observational Journal Protocol

Date:	Time:	Length of Observation:
-------	-------	------------------------

#### Demographic Notes:

<b>Student Code Name:</b> <b>Grade Level:</b>
<b>Observation site:</b>
<b>Type of setting:</b> Check or fill in one Typical Art Cycle: <input type="checkbox"/> Individual Session: <input type="checkbox"/>
<b>Number of Students present:</b>
<b>Number of Adults in the room:</b>

#### Class Setup:

--

<b>Objective of Session or class</b>	
<b>Materials Chosen</b>	
<b>Maladaptive behaviors observed?</b> Yes: <input type="checkbox"/> No: <input type="checkbox"/> <i>If yes what type?</i> Negative self talk: <input type="checkbox"/> Avoidance behavior: <input type="checkbox"/> Discard/Damaged work: <input type="checkbox"/> Other: _____ <b>Other details:</b>	

<b>Coping technique attempted?</b>	<p>Yes: <input type="checkbox"/> No: <input type="checkbox"/> <i>If yes what type?</i></p> <p>SI technique: <input type="checkbox"/> Break: <input type="checkbox"/> Small Artwork: <input type="checkbox"/> Other Attempts: _____</p> <p>Notes:</p>
<b>Accommodations made</b>	
<b>Other notes:</b>	

**Photo Log, Observational Protocol**

Photographs of student art activities, written self-statements, reflections and exit tickets will be taken and documented in a photo log specific to each participant. The date the photograph was taken, type of session, and any relevant notes will be recorded in this log.

**Student name:**

Photo #	Date	I or C	Photographs and Notes

\_\_\_\_\_’s Photo log. \*Type of session I- Individual Session, C- Class Session



### Attendance Log Protocol

#### Individual Sessions: Student Attendance Log

Each participant will meet with the Teacher-Researcher at least eight times outside of their regular class period to practice the SI technique. Dates of session numbers and interviews for each participant will be tracked here.

Dates:

Session #	Participant 1	Participant 2	Participant 3	Participant 4
<b>Interview I</b>				
<b>1</b>				
<b>2</b>				
<b>3</b>				
<b>4</b>				
<b>5</b>				
<b>6</b>				
<b>7</b>				
<b>8</b>				
<b>9</b>				
<b>10</b>				
<b>Final Interview</b>				

**Interview Protocol**

Students will meet with the Teacher-researcher individually to participate in semi-formal interviews, two-three times during the study; an interview will take place during the beginning and the end of the study. Each interviewee will be asked identical open-ended questions, both interviews will have similar questions about students' perceptions of art, but the end of the study interview will have questions to evaluate students' perceptions of the SI process being taught in the study. Questions from the first interview will explore students' prior experiences with feelings of frustration or doubt in the art room, as well as their views on art. The last interview will focus on each student's experience with the overall study.

Interview steps will include the following:

1. Interview conditions:
  - a. Interviews will take place in the empty art room for approximately fifteen minutes during the first small work session scheduled together. If needed an extra interview session will be added.
  - b. Students will be interviewed individually at a one-to-one ratio.
  - c. Students will be given a choice in seating for the interview and may choose to sit where it is most comfortable for them.
  - d. The researcher will sit opposite of the student throughout the interview.
  - e. Audio will be recorded during each interview in order to ensure experimental control and accuracy in transcripts.
  - f. Transcripts of each interview will be created.

- g. All transcripts will be labeled with the student's pseudonym and date.
2. Students will be greeted and will be asked the scripted topic questions listed below.
3. Students will be asked to interrupt at any time if they are confused or need clarification.
4. Students will be asked questions about their experiences, as listed below.
5. Questions will be repeated after ten seconds if no verbal response is given. The next question will be asked if the student has still not responded after an additional ten seconds.
6. Each student will be asked identical questions, questions may be rephrased to aid in student understanding.

### Interview I

<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
<b>Interviewer:</b>	<b>Interviewee:</b>	

### Spark

Question (Q): How is your day going?

Researcher Response (RR): *Today I would like to talk to you about some of your experiences in art class, that you might have talked to me about, or your classmates about, or I may have observed. I am really interested in how you feel about art as a subject and how you feel at different times when you make art.*

Q: Does that sound ok?

RR: *I want you to answer each question to the best of your ability. There are no right or wrong answers. If at any time you feel uncomfortable answering a question, you may choose not to answer it. If you are not sure what I am asking you, you can skip the question, or you can ask me to try and say it again in a different way. You may also choose to end the interview at any point, should you feel the need to do so.*

*Also, there may be times during the interview when you might be worried about my feelings, or my opinion of you if you answer honestly. I want to promise you that this is a safe space for you to share. I want to know what you really think and feel, it is very important to me that you know I will not be upset with you if you think or feel differently than I do about something, even if I feel differently, or even hoped you did, my view of you as an artist, student, and person will not change.*

Q: Do you have any questions before we begin? Are you ready to begin?

### **Interview Questions**

1. For the purpose of this study I need to give you an amazing code name to keep your identity secret, do you have a secret code name in mind? If not, do you mind if I pick one for you?
2. I wanted to ask you to tell me a few things that you love to do. Did you have to work hard to learn any of these things?
  - a. Was there ever a time that \_\_\_\_\_ was really hard for you?
  - b. What did you do?
3. What do you think about making, or looking at art?
4. Do you ever make art outside of school? If so, what kind?
5. Do you think art is something everyone can do? Why or why not?
6. I want to talk to you about our art class. How do you feel about the work you do in art class?
  - a. Why do you feel that way? We can look at your most recent artwork if you want to.
7. Do you ever feel worried in art class about your abilities?
8. Would you call yourself an artist? Why or why not?
9. What do you do when you get too worried or stressed?
10. Are there any art activities you really do not like?
  - a. If so, which materials frustrate you?
  - b. What about them frustrates you?
11. Do you think the way you feel about art or making things can change?

### **Closure**

RR: *Thank you so much for talking to me. I really appreciate your honesty and willingness to share with me today.*

Q: Before we finish up, is there anything else you would like to add or talk about with me? Do you have any questions about your participation in this study?

RR: *Thank you again for your time. Your answers are very helpful, and I appreciate your help and honesty.*

**Interview II Final Interview**

<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
<b>Interviewer:</b>	<b>Interviewee:</b>	

**Spark**

Question (Q): How are you?

Researcher Response (RR): *Today I would like to talk to you about your overall experience throughout the study. I am really interested in how you feel about making self-statements - or helpful sentences to help talk differently about your ability to make art. I am also very interested in which art activities and themes you have enjoyed the most and feel best about. I am wondering how these activities and using self-statements have made you feel and if you have been trying to use them outside of our weekly sessions to help you.*

Q: Is that ok?

RR: *I want you to answer each question the best you can, remember there are no right or wrong answers. If at any time you feel uncomfortable answering a question, you may choose not to answer it. If you are not sure what I am asking you, you can skip the question, or you can ask me to try and say it again in a different way. You may also choose to end the interview at any point, should you feel the need to do so.*

*Also, there may be times during the interview when you might be worried about my feelings, or my opinion of you if you answer honestly. I want to promise you that this is a safe space for you to share. I want to know what you really think and feel, it is very important to me that you know I will not be upset with you if you think or feel differently than I do about something, even if I feel differently, or even hoped you did, my view of you as an artist, student, and person will not change.*

Q: Do you have any questions before we begin? Are you ready to begin?

**Interview Questions**

1. The last time we had an interview I asked you to tell me about your ideas, you told me you thought art ( is or is not) something everyone can do. Do you still think that is true? Why or why not?
2. How are your feelings about art right now?
  - a. Do you think you can make art? Why or why not? We can look at your most recent artwork if you want to.
3. We have been working together to create helpful self-statements or helpful sentences by writing, reading, and thinking about what we are doing, and what we can tell ourselves when making art gets hard or we start to worry. I want to ask you a little more about that if that is ok?

- a. We have been trying to look and listen carefully to the words we use when we are working to make sure the words we use to talk to ourselves are kind and helpful. Do you think it is important to think about the words we think and say about ourselves?
- b. How did you feel about writing your own self-statements or ‘helpful sentences’?
  - i. Was this really hard for you to do?
  - ii. Did it get easier to do with practice?
- c. Do you think repeating these sentences out loud or in your head when you make art is helpful? Why?
  - i. *If a student mentions or infers the use of an error script:* I think you are talking about making an error script. When we dislike how things are going, or make a mistake and talk about it and how it could change we are using our sentences to correct an error. Did you find error scripts helpful?
- d. You reported trying/ not really using this technique in regular art class, how did you feel about using your self-scripts in class?
- e. Have you tried, or will you try, this technique when you make artwork at home or for any other reason?
- 4. Was there an art activity prompt that we used during one of our weekly sessions that you really liked and made you feel good or confident in your abilities? Why do you think it made you feel that way?
- 5. Are there any art activities we used during one of our weekly sessions you did not like? If so, what made you dislike it?
- 6. Do you think any of the things we have been practicing, like making small artworks, practicing self-statements, and trying to change our words, have been helpful?
  - a. Have you noticed any changes in your feelings or ability to get started?
- 7. Do you think you can or will still use this technique now that the study is over?

RR: *Thank you so much for talking to me. I really appreciate your honesty and willingness to share with me today.*

Q: Before we finish up, is there anything else you would like to add or talk about with me? Do you have any questions about your participation in this study?

RR: *Thank you again for your time. Your answers are very helpful, and I appreciate your help and honesty.*

### **Individual Sessions for Self-Instruction Training Protocol**

**Purpose of meeting:** Student participants in the study will meet with the Teacher-researcher once a week in addition to any normally scheduled art classes. These sessions will be dedicated to learning Meichenbaum's (1975) proposed Self-instruction technique, or SI training. The training attempts to assist individuals in creating more authentic views of self by acknowledging and reframing thoughts about oneself over time with the help of a created script, rehearsal, and modeling. Meichenbaum's claim suggests teachers may help students work through limiting thoughts and behaviors in the art classroom without crossing boundaries or sharing the origins of their feelings. (1975).

**Time:** Once a week for eight to ten weeks. Sessions will last 15- 30 minutes each and be conducted at the end of the school day, or during another negotiated time between researcher, guardians, and student participants.

#### **What will be done:**

The first session will begin with a semi-formal interview; separate protocols are written for interviews. After this interview the Teacher-researcher will explain the goal for this study to students again, students should have already been briefed on the topic and goal of the study. Student participants will then work with the researcher to explore common language and thoughts expressed by students during the interview or will look back on moments where this language was used in the art room in the past and its effect on creating work. Using this information students will begin to become aware of negative talk, or views that may be getting in the way of their learning, and the Self-instruction technique will be introduced. The teacher-researcher will demonstrate how they have or can create a list of sentences or self-statements that can help them before and during times they feel discouraged. Creating works of art themselves, they will demonstrate out loud how to use these statements to stay on track and productive, as well as how to address errors that may occur without reverting to maladaptive thoughts or behavior. They will then assist participants to begin generating statements in their own words, creating a list, and rehearsing these phrases to help guide work. A self-assessment will be given at the end of each art making session when SI techniques are being practiced. These rehearsals, discussions, self-assessments, and edits to scripted self-statements will be repeated each session to build awareness and skill set. A final interview will be given during the last week of the study for students to reflect on their experiences and current opinions.

#### **Conditions and an outline of each session are found below:**

1. The conditions for individual sessions will be as follows:
  - a. Students will complete their weekly individual session, with Ms. Drissel in the art classroom, at their school site, unless students are required to attend virtually due to exposure to COVID-19, in which we will meet via the Google Meet platform

- b. Students will meet for 15 to 30 minutes once a week.
  - c. Students who miss a session due to absence or school scheduling conflicts will have their sessions rescheduled.
  - d. Sessions will be audio recorded to capture participants' dialogue during each session if permission is given.
  - e. Students may request to discontinue a conversation or thought at any time during discussion or development of self-statements.
  - f. The teacher-researcher will model and participate in art activities and SI training along with student participants unless it proves too distracting for the participant.
2. Students will be greeted by the teacher-researcher and spend some time, dialoguing about self-talk, students and teacher will make drafts of personal SI self-statements, reviewing or creating new scripts.
3. Teacher-researcher will briefly model the use of SI technique using one of the art activity prompts as described in the art activity lesson protocol during the first two sessions, and then only as a review as sessions continue.
4. Students will have a chance to ask clarifying questions about the process, prompt or availability of materials in the classroom.
5. Students will practice using the SI technique by rehearsing their scripts out loud, in a whisper, and then, during later sessions, covertly while completing the art prompt, as weeks move along, students may switch to whispering or practice using scripts covertly in their heads during small sessions.
6. Students will complete the same brief self-assessment about their work each session in which artwork is made. The teacher-researcher may assist students in writing and recording this data if needed.
7. Materials will be put away and artworks and scripts stored securely at the end of the session.



### Art Activities Protocol

During most individual sessions, students will engage in one or more small art activities. These activities will be open for interpretation and not ask for any specific materials or skill set to be utilized. Some prompts may ask students to reflect on their thoughts and feelings. The art prompts given during these sessions are not necessarily aligned or related to grade-level curriculums, but are intended as additional experiences for students to explore artmaking, and serve as a practice artmaking session in which students can practice implementing self-instruction techniques. Meichenbaum's self-instruction technique involves both modeling by the *experimenter* (the teacher-researcher) and several types of rehearsal completed by subjects (Meichenbaum and Cameron, 1974). Students will begin developing new self-statements during individual sessions, these art activities are needed in order for subjects to be able to rehearse this technique in a more private manner, particularly early on in the study. Students will be given a different prompt each session but may request to change or revisit prompts; they may also elect to come up with their own theme if requested. Any available material in the room can be used to complete these art activities, but students will only have a short amount of time in which to work. A template will be used to allow for a spot to complete, attach, or temporarily place small artworks on while briefly (3-5 minutes) reflecting on the activity in writing or pictures. Written questions will be read to students and verbal responses recorded on behalf of the student if needed or requested. These art activities will not be used during participants' regular art classes due to time constraints. During most regular art days, participants will be given an exit ticket at the end of class in which they may reflect on their feelings and experiences while working on grade level projects or curriculum and the use or non-use of SI techniques in class.

The steps for the SI rehearsal activities will include:

1. The conditions when creating art **during individual sessions** will be as follows:
  - a. Students will complete their activities during their weekly individual session, this will be completed in the art classroom, at their school site, unless students are required to attend virtually due to exposure to COVID-19, in which we will meet via the Google Meet platform.
  - b. Students will be given ten to twenty minutes to work on their art making prompt, (detailed in following documents), using SI techniques to help reassure personal progress and utilize error reporting or refining scripts when errors occur. About three minutes will be given for post-artmaking reflections and ability rating scales.
  - c. Student participants will store their artwork in a designated folder that will be collected at the end of each session. If student participants request to take home these small works they will be allowed after work, and reflections are carefully photographed for later reference.
  - d. Student artwork will be digitally photographed after each session.

- e. Drawing sessions will be audio recorded to capture participants' dialogue during each drawing session if permission is given to help ensure accurate observational records.
  - f. Art material choices will only be limited to what is currently available in the art room or materials in which students have at home, these can be materials traditionally used for 2D or 3D works, anything in the classroom that has been left out for student use can be utilized.
2. Students will be greeted by the teacher-researcher and spend some time, dialoguing about self-talk, students and teacher will make drafts of personal SI self-statements, reviewing or creating new scripts.
  3. Teacher-researchers will briefly model the use of SI technique using the activity as described in the plans below.
  4. Students will have a chance to ask clarifying questions about the process, prompt or availability of materials in the classroom.
  5. Students will practice using the SI technique by rehearsing their scripts out loud, in a whisper, and later in the study, covertly in their heads while completing the art prompt.
  6. Students will complete a brief self-assessment about their work. Teacher-researchers may assist students in writing and recording this data if needed or requested.
  7. Materials will be put away and artworks and scripts stored securely at the end of the session.
- 

1. The conditions **if SI techniques are utilized during regular art class** will be as follows:
  - a. Students will complete their grade-level projects and activities during their regularly scheduled art period, in an art classroom with their peers, at their school site.
  - b. Students will complete their activities during their regularly scheduled art period, in an art classroom with their peers, at their school site unless students are required to attend virtually due to exposure to COVID-19, in which we will meet via the Google Meet platform.
  - c. The use of SI techniques will not be explicitly taught in the regular art class, students may use this technique, but it will not be required to do so out loud to ensure no one feels singled out. About three minutes will be given for participants to complete a post-artmaking exit ticket.

- d. Student participants will store their artwork in a designated folder that will be collected at the end of each class along with their peers; in-class projects and activities will not be documented for the study.
  - e. No audio recording will be used in class sessions, only observational data and exit tickets will be utilized in the study.
  - f. Art material choices will only be limited to what is currently available in the art room for students' use.
2. Students will be greeted by the teacher-researcher and be asked to begin their typical beginning of the class routines. Teacher-researchers will answer clarifying questions.
3. Data from in-class projects will not be included in the case study.
4. At the end of class Participants will fill out a quick 4 question exit ticket before leaving.

## APPENDIX C: Art Activities, Worksheets and Student Reflection Forms

### Small Art Activities Lesson Plan

**Activity:** Creation of small works of art for brainstorming, reflection and practice of different skills.

**Grade levels:** Appropriate for Kindergarten through Fifth-grade

**Materials:** Various available supplies, examples: colored pencils, oil pastels, crayons, pencils, markers, string, fuzzy wires, wire, colored papers, glue, scissors, tempera paint, ect.

**Development Rationale/Prior Learning:** Students will engage in creating small works of art inspired by a teacher created prompt. These prompts will ask for students to explore materials and mark making, and may ask them to reflect on their ideas, as well as themselves. The prompts ask students to consider aspects of themselves and their preferred aesthetics, and associations they have with various things. Students will also be given the opportunity to experiment and expand upon their knowledge of materials, color, and mark making. Students will strengthen their creative problem solving skills as they develop small works of art. These small work sessions will be considered as skill building activities and as an ‘art tool’ in the classroom that can be used for practicing new concepts, trying out materials, and as small art-centered breaks.

**Note:** Prompts do not need to be used in any sequence and not all prompts are needed. Please refer to the prompt type by its number listed in this plan when cataloging data.

### Standards:

#### **National Standards:**

**VA:Cr1.2.3a** Apply knowledge of available resources, tools, and technologies to investigate personal ideas through the art-making process.

**VA:Cr3.1.5a** Create artist statements using art vocabulary to describe personal choices in artmaking.

**VA:Cr1.1.3a** Elaborate on an imaginative idea

<https://www.nationalartsstandards.org/>

#### **PA Standards:**

**9.1.3.A:** Know and use the elements and principles of each art form to create works in the arts and humanities.

**9.1.3.K:** Know and use traditional and contemporary technologies for furthering knowledge and understanding in the humanities.

**9.4.3.D:** Recognize that choices made by artists regarding subject matter and themes communicate ideas through works in the arts and humanities

**9.4.5.D** Explain choices made regarding media, technique, form, subject matter and themes that communicate the artist’s philosophy within a work in the arts and humanities.

<https://www.pdesas.org/Standard/View#0%7c781%7c0%7c0>

### **Possible Adaptations and Modifications**

Students will be able to choose the materials they would like to explore for each activity. For drawing or 2D work, small precut paper will be provided, and tape will be available to students who wish to tape their paper to the table surface. Students may have extended time to complete their drawing and reflective assessments if they wish, although completeness is not expected for these short art activities. Students who need personal accommodations as indicated by IEP will be provided with necessary support. A visual timer will be utilized for students to gauge the amount of time left in the session when needed or requested. The teacher realizes that timers can be distracting or anxiety producing for some students. Teacher will read and transcribe for students on an as needed basis. Other accommodations will be given as needs arise or are identified.

Prompt #	Activity
1	Make an artwork by exploring different ways to leave a mark.
2	Make an artwork by using repeated shapes and lines.
3	Create your own patterned artwork.
4	Create a mandala (or zentangle 5th grade only).
5	Create an artwork that uses a lot of texture.
6	Sound inspired drawing: Listening to instrumental versions of a current popular song.
7	Sound inspired drawing: Listening to meditative music.
8	Using color and mark making to show specific feelings.
9	Use color to show how you feel at this moment. Why did you choose these colors and images?
10	Use color and imagery to show something positive in your life. This can be a person, a place, a thought or an idea. Why do they make you feel good? Draw something to represent your positive thoughts.
11	If worry or fear had a body, what would it look like? Can you make a friend for your worry or fear to help it feel better?
12	What or who are you grateful for? Make a small artwork or write a letter to those you are grateful for.
13	What inspires and excites you?

	Or What are you looking forward to?
14	If I were a superhero I would _____? Or I can be a hero by _____?
15	Finish the phrase “I am...” five different ways. Choose one of your statements to illustrate.

**Clean-up:** Students will be given four minutes to put away their materials at the end of class and store their artwork. Students will put their drawing materials in their appropriate container, on the materials table and clean their space if needed. Students will also put their activity in their individual or table folder.

**Closure:** Students will be given about five minutes to complete a brief reflection and abilities rating scale, or class exit ticket pertaining to their experiences with SI and the prompt, and any other feelings they may have noticed and want to share.

**Assessment (Formative):** For the purpose of this study students will not be assessed on small works, these activities are meant as practice and rehearsal sessions and observational data and self reflections collected will help the teacher guide further instruction.

Code Name: \_\_\_\_\_

### Art Activity Paper Student Self-Assessment

Please look at what you made and answer the questions.

1. Before you start: How do you feel about your ability to make your small artwork?



Great: Very Confident



Good: little worry



Ok: worried



Upset: Very Worried



Badly: Unconfident

**Fold here to hide!**

2. What did you make? Or what materials did you use?

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3. How do you feel about your abilities after practicing your special scripted sentences as you worked?



Great: Confident



Good: little worried



Ok: worried



Upset: Very Worried



Badly: Unconfident

4. Do you think your special script and sentences helped you feel less worried? How did it help or not help?

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5. Anything else you want me to know?

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For Teacher information:

**Did the student have help completing this form?**

Yes ☐ No ☐

**Helped by:** Reading: ☐ Transcribing: ☐ other:

**Initials of helper:**



**End of Art Class Exit Ticket**

Code Name: \_\_\_\_\_ Date: \_\_\_\_\_

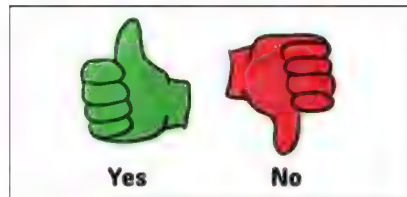
1. I made an artwork today:



2. I felt worried or unsure today when I was making art.



3. I thought about, said, or read the sentences I made to help me if things got hard.



4. If you used your sentences, did they help?



Anything else you want me to know?

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For Teacher information:

Did the student have help completing this form?

Yes ☐ No ☐Helped by: Reading: ☐ Transcribing: ☐ other: \_\_\_\_\_

Initials of helper: \_\_\_\_\_

### Self Instruction Sentences Brainstorming Worksheet

Code name: \_\_\_\_\_ Date: \_\_\_\_\_

What I can tell myself before I begin working:

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What I can tell myself if I make a mistake to help me stay calm:

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**APPENDIX D: General or Combined Data Logs****Individual Sessions: Student Attendance Log**

Each participant will meet with the Teacher-Researcher at least eight times outside of their regular class period to practice the SI technique. Dates of session numbers and interviews for each participant will be tracked here along with dates of any missed sessions.

**Dates of the Study: February 16th - May 12th, 2022**

Session #	Blue Monster	Triangle	Pastel	Raptor
<b>Interview I</b>	2/16	2/16	Part 1 2/24 Part 2 2/28	2/18
<b>1</b>	2/23	Absent 2/23 3/2	3/3	Attempted 2/25 3/4
<b>2</b>	3/2	3/9	3/7	3/11 assembly 3/15
<b>3</b>	3/9	Half-day 3/23 no session 3/16	Absent 3/14 and 3/21 3/28	Half-day 3/22 no session 3/29
<b>4</b>	3/16	3/30	3/31	4/5
<b>5</b>	3/21	4/6	4/4	4/19 Data collection concluded
<b>6</b>	3/30	4/20	4/18	X
<b>7</b>	4/6	4/27	4/25	X
<b>8</b>	4/20	5/4	5/3	X
<b>9</b>	4/25	X	X	X
<b>10</b>	X	X	X	X
<b>Final Interview</b>	5/2	5/11	5/9 Absent rescheduled 5/12	X

**Student-created Self-Statement Examples**

Blue Monster	Triangle	Pastel
It will be easy.	This is going well.	I will do great.
I can do this.	There is no such thing as bad.	I will not give up!!
I can focus on something certain.	It's okay to mess up.	I am doing great!!
What do I want to draw?	It's okay to change your idea.	I can do this!!
I can fix this.	It's never too late to change something.	Amazing!
This is what I can do....	Focus on one thing at a time.	I will get through this!!!
I will start off with this.....	Never give up.	I believe in myself.
I can end with this....	Think about what you do before you start.	I will find a way to change my mistakes.
I will finish and change things later.	Never turn yourself down.	I feel great.
** Easy Money - spoken never written	Never stop trying.	
	Work hard and don't stop.	

**Themes noticed in self-statement type:**

Color-coded, some statements are double coded

Motivational Phrases

Reflecting/ reminders of what you are doing

Reassurances When errors are made

Perseverance

Blue Monster	Triangle	Pastel
It will be easy.	This is going well.	I will do great.
I can do this.	There is no such thing as bad.	I will not give up!!
I can focus on something certain.	It's okay to mess up.	I am doing great!!
What do I want to draw?	It's okay to change your idea.	I can do this!!
I can fix this.	It's never too late to change something.	Amazing!
This is what I can do....	Focus on one thing at a time.	I will get through this!!!
I will start off with this.....	Never give up.	I believe in myself.
I can end with this....	Think about what you do before you start.	I will find a way to change my mistakes.
I will finish and change things later.	Never turn yourself down.	I feel great.
** Easy Money - spoken never written	Never stop trying.	
	Work hard and don't stop.	

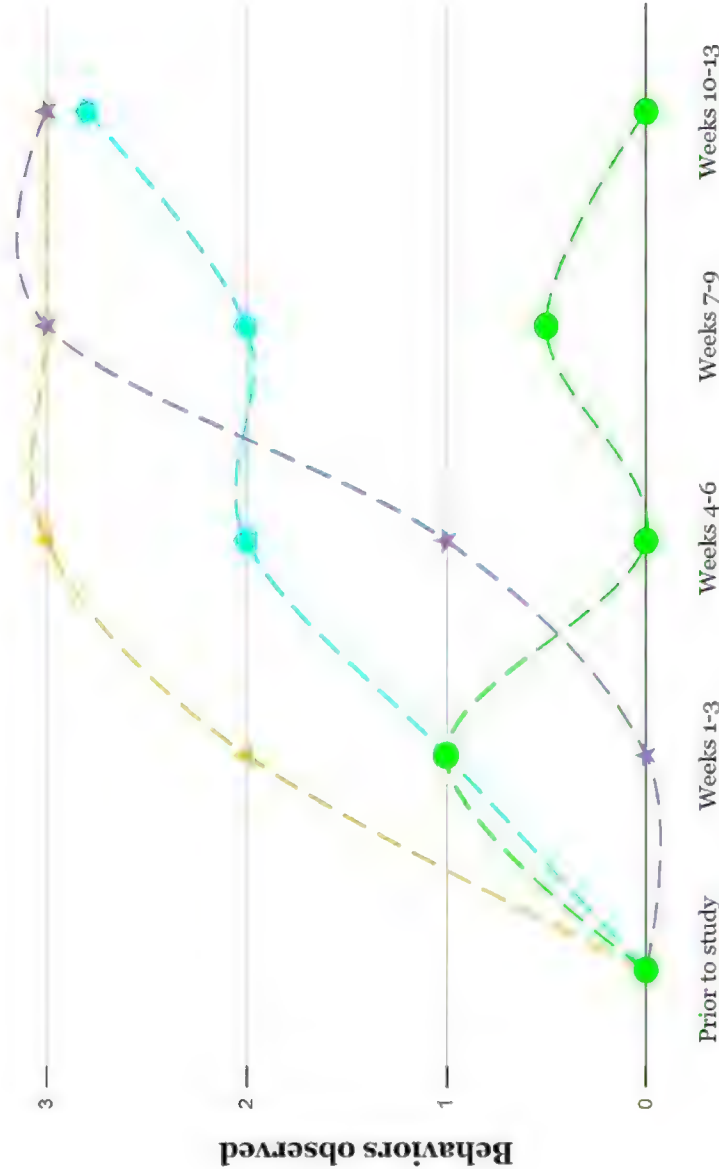
**Phrase themes/ categories**

Coded by contributor: Blue monster, Triangle, Pastel

Motivational Phrases	Reflecting/ reminders of what you are doing	Reassurances When errors are made	Perseverance
It will be easy.	I will finish and change things later.	I will finish and change things later.	I will finish and change things later.
I can do this.	I can focus on something certain.	I can do this.	I can do this.
** Easy Money ~ spoken	What do I want to draw?	I can fix this.	This is going well
There is no such thing as bad.	This is what I can do....	This is what I can do....	It's never too late to change something.
Never give up.	Motivational Phrases	I will start off with this....	Focus on one thing at a time.
Never turn yourself down.	It will be easy.	I can end with this....	Never give up.
Never stop trying.	Think about what you do before you start.	It's never too late to change something.	Never turn yourself down.
Work hard and don't stop.		There is no such thing as bad.	Never stop trying.
I will do great.		It's okay to mess up.	Work hard and don't stop.
I will not give up!!		It's okay to change your idea.	I believe in myself.
I can do this!!		I will find a way to change my mistakes.	I will find a way to change my mistakes.
Amazing!		I will get through this!!!	I will not give up!!
I believe in myself.		I will not give up!!	I am doing great!!
I feel great.			I can do this!!

Student Participation in SI

0= Not observed 1= Observe some 2= Observed Majority of the time 3= Observed all the time

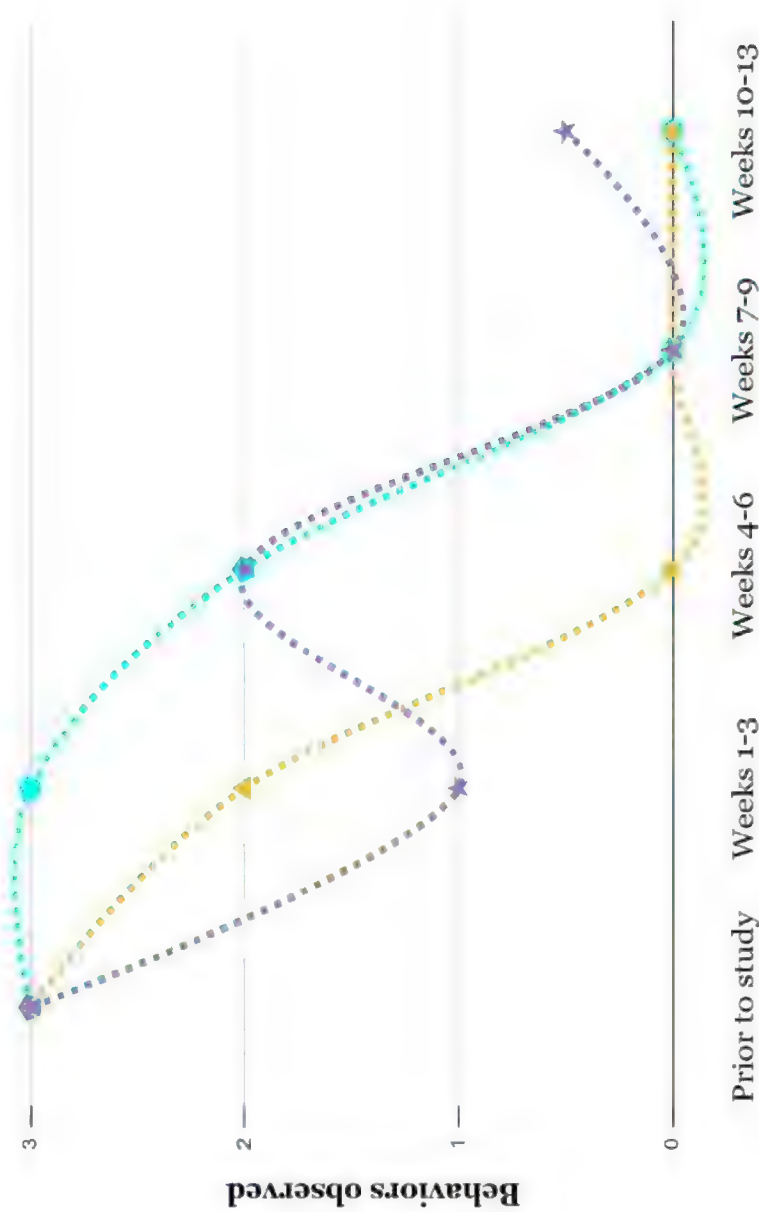


Observations During the Study

- Blue Monster use of SI
- Triangle use of SI
- Pastel use of SI
- Raptor use of SI

# Student Participation in SI and Observed Changes in Negative Self-Talk

0 = Not observed 1 = Observe some 2 = Observed Majority of the time 3 = Observed all the time



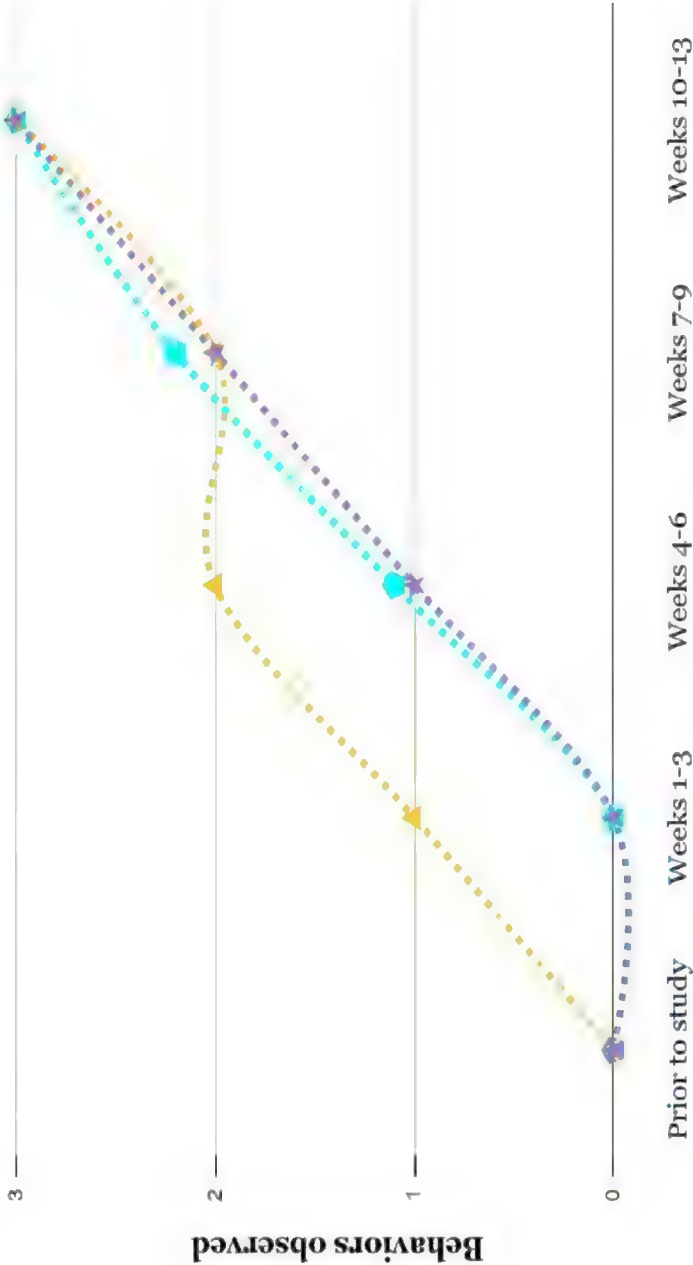
## Observations During the Study

- Blue Monster use of negative self-talk
- Triangle use of negative self-talk
- Pastel use of negative self-talk



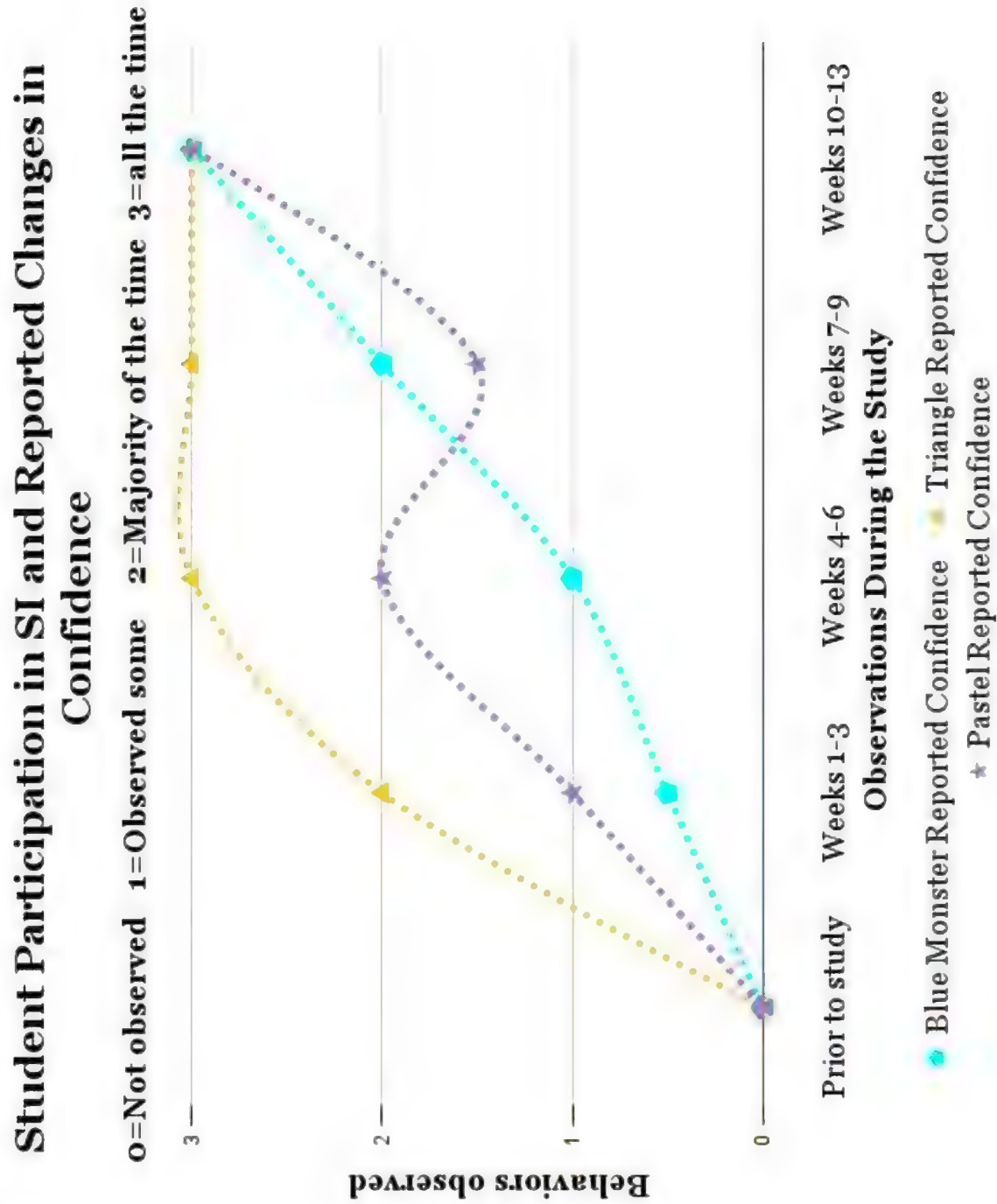
# Student Participation in SI and Observed Changes in Independence

0 = Not observed 1 = Observe some 2 = Observed Majority of the time 3 = Observed all the time



## Observations During the Study

- Blue Monster independent problem-solving
- Triangle independent problem-solving
- Pastel independent problem-solving



### APPENDIX E: Blue Monster's Coded Data

#### Blue Monster's Timeline

C- In-class data

SI - Individual Session, 16 observations

2/18	2/23	3/1	3/2	3/9	3/9	3/16	3/17	3/21	3/30	4/4	4/6	4/19	4/20	4/25	4/27
C	SI 1	C	SI 2	C	SI 3	SI 4	C	SI 5	SI 6	C	SI 7	C	SI 8	SI 9	C

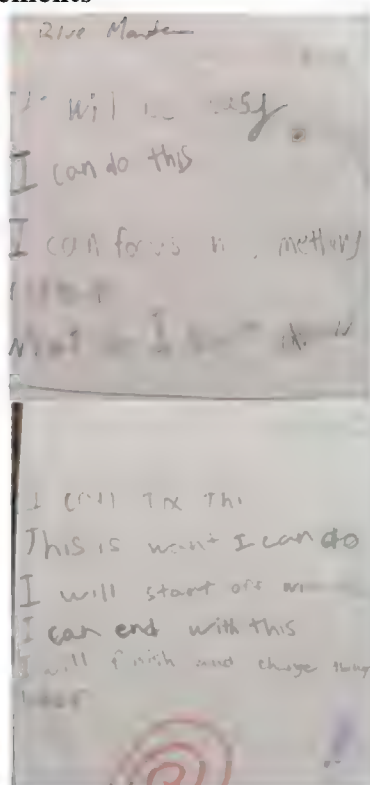
#### Timeline Key

Observed or Reported instances of:

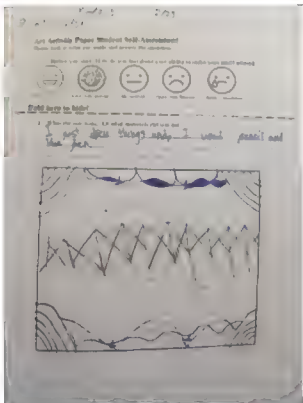

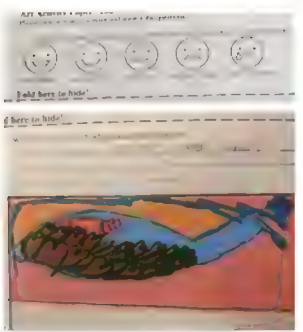
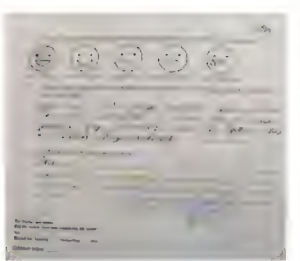


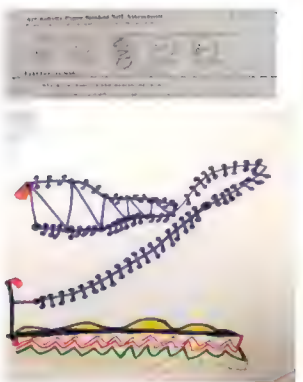
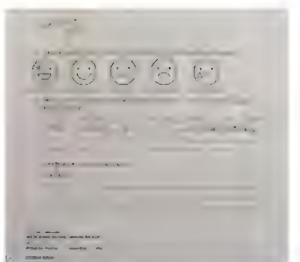
Negative Self-talk	Other Maladaptive behaviors	Reported worry	Independent problem solving and reassurance	Dependence on teacher for reassurance and support problem solving	Positive report of change after SI use/ SI was helpful	SI used with help	SI used independently

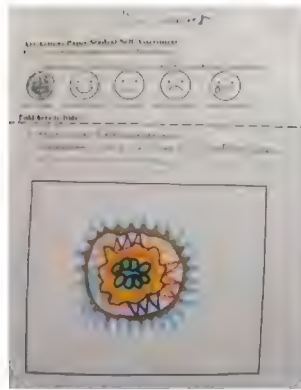

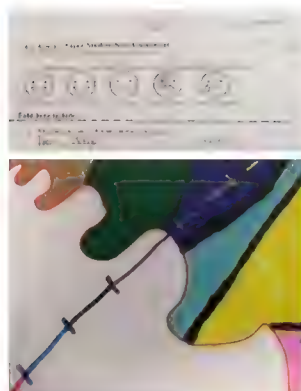

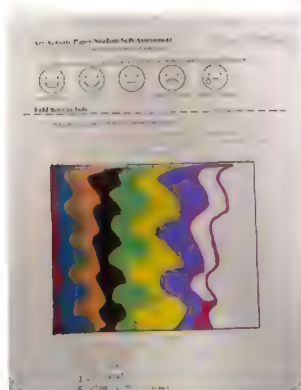

#### Blue Monsters Written Self-Statements

Blue Monster
It will be easy.
I can do this.
I can focus on something certain.
What do I want to draw?
I can fix this.
This is what I can do....
I will start off with this.....
I can end with this....
I will finish and change things later.
** Easy Money - spoken never written

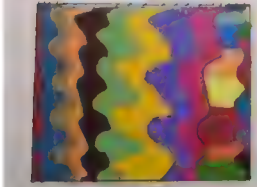
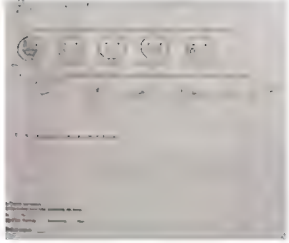




## Blue Monster SI Training Self-Reflection Matrices

Date	Session #	Key Points and words	Beginning	After Using SI
2/23	1	Beginning: A little worried End: Confident  Prompt: 3 Used: Pencil, pen  Did SI Help: not really Did not use strategy much		
3/2	2	Beginning: worried End: Confident  Prompt: 7 Used: marker, pen  Did SI Help: yes Frustrated Changed drawing “now I like it”		
3/9	3	Beginning: Confident End: Confident  Prompt: 7 Used: marker, pen  Did SI Help: yes “... it helped me stay focused.”		
3/16	4	Beginning: worried End: Confident  Prompt: 11 Used: pen, marker, larger paper, objects to trace.  Did SI Help: yes Helped when frustrated.		











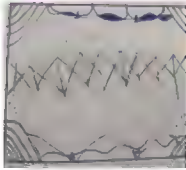


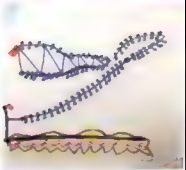

3/21	5	<p>Beginning: <b>Confident</b> End: <b>Confident</b></p> <p>Prompt: 4 Used: marker, pen</p> <p>Did SI Help: <b>yes</b> talking out loud "... I can say what I am going to do"</p>	 
3/30	6	<p>Beginning: <b>Very worried</b> End: <b>Confident</b></p> <p>Prompt: 5 Used: marker Title: The Slump</p> <p>Did SI Help: <b>yes</b></p> <p>Used them, "I didn't even realize. [I was using the technique]."</p>	 
4/6	7	<p>Beginning: <b>A little worried</b> End: <b>Confident</b></p> <p>Prompt: 15 Used: marker</p> <p>Did SI Help: <b>yes</b></p> <p>Used them in my head</p>	 



4/20	8	<p>Beginning: a little worried End: Confident</p> <p>Prompt: 15 Used: marker</p> <p>Did SI Help: yes</p> <p>They helped.</p>		
4/25 end	9	<p>Beginning: A little worried End: a little worried</p> <p>Inspired by last session's drawing</p> <p>Used: marker</p> <p>Did SI Help: yes</p> <p>They helped.</p>		 <p>** Did not like the finished work, but I finished it.</p> <p>Remarked that SI helped him finish it.</p>

**Blue Monsters SI Sessions Observational and Transcription Data Matrix**










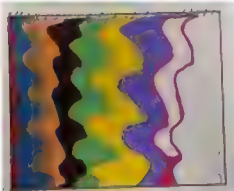
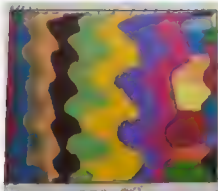

Date	2/23	3/2	3/9	3/16	3/21
Session	1	2	3	4	5
Prompt #	3	7	7 continued	11	4
Materials	Pen and pencil	Marker and pen	Marker and pen	Marker, pen, larger paper, objects to trace	Marker, pen
Maladaptive behaviors observed	Yes	Yes	Yes	Yes	No
Type of behavior	Negative self talk	Negative self talk	Negative self talk	Negative self talk	N/A
Negative self-talk if used	'I don't have great writing'  Not great	"I really don't like it at all actually" Horrible Just horrible	Crazy  Messed up	Messed up  Want it perfect  Not right	n/a
Non verbal signs of self-doubt	Facial expressions	Facial expressions Stopping, sighing	Freeze, 'oh no' stares and tenses up	n/a	n/a
SI technique used with teacher help or independently	Help  Independent	Help  Independent	Help  Independent	Help  Independent	Help  Independent
Observed or reported results while using SI	Student guided through using SI script and narration out loud.  Felt awkward.  Minimal success making a change  Not very impressed with his creation but thought it was 'fine'.	Used negative self-talk that was nonspecific.  Showed all or nothing thinking.  Guided out of that thinking with SI prompting.  Using questions, and narration with SI, participant	Mostly independent today using SI. Needed reminders to start out but used them organically.  Needed assistance when he dropped a marker and left a mark on the page he did not intend for, he froze up and got nervous. I was able to ask a question to get	Showing more independence using SI, I do not need to prompt him.  Student moved quickly past this dislike of his first idea and moved on to another quickly, needing clarification and assurance that he was allowed to change ideas, he thought out	Talked out all of his decisions using SI Independent today

		made new choices and turned it into something more positive.  Language changed to describe images that were less negatively charged.	him to notice what happened and he came up with a solution. He did not get stuck in a negative mindset and moved on well.	a new idea and implemented it.	
Other coping techniques attempted	n/a	n/a	n/a	n/a	n/a
Other Observations	Seemed to feel a little awkward about trying out the technique, still reported a positive change in the end but wasn't sure he attributed those feelings to the technique	Once Blue Monster took the challenge of evaluating and talking though new decisions he seemed to relax physically.  Ended up liking the final imagery so far.	It seemed like he felt less awkward using SI.	Needed assurance that he was allowed to change his mind about his plan  Able to change gears quickly without avoiding work completely.	Very positive
Self-reflection Before starting	 Good: little worried	 Ok: worried	 Great: Confident	 Ok: worried	 Great: Confident
Self-reflection after using SI	 Great: Confident	 Great: Confident	 Great: Confident	 Great: Confident	 Great: Confident
					
Keywords used in session or reflection	'Didn't really use them today'  Alkword	Horrible  Better Nest	Fixed it	Messed up Change it Emotion Roller coaster	Talking out loud


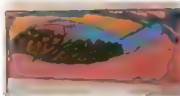



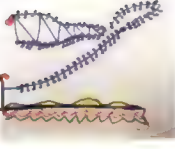
**Blue Monster SI Training Continued**

Date	3/30	4/6	4/20	4/25
Session	6	7	8	9 end
Prompt #	5	15	15	Inspired by session 8
Materials	marker	marker	marker	marker
Maladaptive behaviors observed	No	No	No	No
Type of behavior	N/A	N/A	N/A	N/A
Negative self-talk if used	n/a	n/a	n/a	n/a
Non verbal signs of self-doubt	Facial expressions 'oh!'	n/a	n/a	n/a
SI technique used with:	Help Independent	Help Independent	Help Independent	Help - guiding questions only Independent
Observed or reported results while using SI	Utilized SI independently without notice.  Seemed to increase his focus	Independently using SI without notice.  Remained calm when making small errors, small accidents into intentional marks, no negative language use, remained positive.	Utilized SI independently without notice again.  Changed plan for his drawing when he made a mistake	Blue Monster did not like his finished work.  Used SI to finish it anyway to see if his opinion changes, it did not, but this was a huge deal.  Blue Monster did not give up.
Other coping techniques attempted	n/a	n/a	n/a	n/a
Other Observations	Experimenting with color and line more, less worried about making recognizable things then in the past.	Blue Monster made 'mistakes' in his work. unintentional marks bled into the wrong spot. Prior behavioral to mistake = discard/discontinue or spiral into negative self-talk.  Continued on and worked through these moments.	Requested an additional session, I granted that request.  One more meeting before our final interview.	Almost seemed like he was ready to scribble over the entire artwork, but refrained from doing so. Seemed more open to making a mistake

Self-reflection Before starting	 Upset: Very Worried	 Good: little worried	 Good: little worried	 Good: little worried
Self-reflection on after using SI	 Great: Confident	 Great: Confident	 Great: Confident	 Good: little worried
				
Keywords used in session or reflections	“I didn't even realize. [I was using the technique].”			I don't like it It was ok Almost scribbled it out

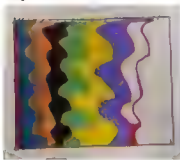
## Blue Monster SI Session Quotes/ Examples

Date	Overview of self-assessment	Quotes and Examples of students' experiences with SI technique
2/23 #1	Beginning: A little worried End: Confident Prompt: 3 Did SI Help: not really Did not use strategy much 	<p><b>Small changes of wording to make statements non-judgemental:</b></p> <p>Blue Monster: If I mess up, I can see what I did wrong.</p> <p>Teacher: OK. So if I mess up, I can look to see – what if we say what feels wrong?</p> <p>Blue Monster: Yeah.</p> <p>Teacher: Because we don't want to accuse ourselves of being wrong.</p> <p><b>First attempt to use SI:</b></p> <p>“Blue Monster: I'm going to draw those in each corner, but the same amount. Five, three, huh, five. Then, I don't know what to do.</p> <p>Teacher: It's a patterned artwork. So what could a pattern be? Pattern is a repeated image. [Pause] [silence, 0:19:53]. How do you feel about this?</p> <p>Blue Monster: I don't really like it.</p> <p>Teacher: OK. So that's something that we're acknowledging, that you don't really like it right now. How do you think you can make it into something that you do like? Because you can do what? Which one of your statements that we say? You can say it right out loud.</p> <p>Blue Monster: “I can fix this.”</p> <p>Teacher: OK. How can you fix this?</p> <p>Blue Monster: With the pencil.</p> <p>Teacher: OK. So what are you going to add?</p> <p>Blue Monster: Line and it's going to turn into something – that I like better, I think I like that better. It's fine.”</p>
3/2 #2	Beginning: worried End: Confident Prompt: 7 Did SI Help: yes Frustrated Changed drawing “now I like it” 	<p><b>Successful error script:</b></p> <p>Blue Monster: I don't really like it at all actually.</p> <p>Teacher: Why?</p> <p>Blue Monster: Because I just think it's horrible.</p> <p>Teacher: Why is it horrible?</p> <p>Blue monster: Because I didn't do it right.</p> <p>Teacher: What does that mean though?</p> <p>Blue Monster: I don't know.</p> <p>Teacher: What about it doesn't feel right?</p> <p>Blue Monster: It just feels bad.</p> <p>Teacher: OK. So why don't you stop for a moment.</p> <p>Blue Monster: I think I know what to do though.</p> <p>Teacher: OK. So what should you do? Tell yourself that.</p> <p>Blue Monster: I'm going to try to turn it into something else. Like something I like. Maybe a bird's nest. Because I can make leaves right here. I need ...</p> <p>Teacher: If you want the [unintelligible 00:17:51] markers, too because those are different kinds of colors, I can get those. Would you like them?</p> <p>Blue Monster: Nah, I'm good. I'm actually starting to like this.</p> <p>Teacher: OK. So changing it into a new idea helped.</p>

		<p>Blue Monster: Yeah.”</p> <p><b>The end:</b> Blue Monster: Looks pretty nice to me.</p>
3/9 #3	<p>Beginning: <b>Confident</b> End: <b>Confident</b> Prompt: 7 Did SI Help: <b>yes</b> “... it helped me stay focused.”</p> 	<p><b>Successful error script, noticed he could make an error seem intentional:</b></p> <p>Blue Monster: [Pause and freezes] Teacher: That's ok. Sometimes that happens. Ok. So that was not intentional, right? So what can we do? Blue Monster: I don't know. Teacher: So what happened? Blue Monster: It just slipped out of my hand. Teacher: Just slipped out of your hand and it left a mark, right? Blue Monster: Yeah. Teacher: So - Blue Monster: They're driving me crazy. Teacher: Ok. So what can we do about that? Blue Monster: Try and draw. Teacher: So it flips out of your hand and it left a little mark. So first solution - try to draw over it. Did that work? Blue Monster: It will work and this is coming out. I'm going to keep trying. Teacher: So what are you doing right now to try to help? Blue Monster: Drawing over it and - blending up and - blending it together. Kind of. It's making it darker so we're going to have to put a second layer. Teacher: That was a great solution. Does that make you feel a little bit better? Blue Monster: Yes. Teacher: Ok. Blue Monster: Because it only blended right there. I'm just trying to get this second layer - was because it took me a lot the first time because I tried to do everything. But now I realize that it doesn't really make any difference if it has that because it just looks like I was drawing with that and it's still wet.</p>
3/16 #4	<p>Beginning: <b>worried</b> End: <b>Confident</b> Prompt: 11 Used: pen, Did SI Help: <b>yes</b> Help when frustrated.</p> 	<p><b>Talking about creating self statements for errors on the spot:</b></p> <p>Blue Monster : Yeah, I could just like do a new one and do it better there or do something else there. Teacher: OK. So it lets you - having done this process let you think that it was OK to start something new. Blue Monster : Yeah. Teacher: All right. Where maybe you wouldn't have been able to let go of that before. Is that what you mean? Blue Monster : Yeah. Teacher: OK, I just wanted to make sure I understood you correctly. Thanks for that clarification. And I'll see you again - next week</p>



<p>3/21 #5</p>	<p>Beginning: <b>Confident</b> End: <b>Confident</b> Prompt: 4 Did SI Help: <b>yes</b> talking out loud</p> 	<p><b>Explaining how SI helped even though he had not been worried:</b></p> <p>Blue Monster: Out loud – talking is helpful – talking is helpful because – because you’re saying out loud. And just saying what you’re going to do? Teacher: OK. So it helps you anticipate what you’re going to do? Blue Monster : Yeah.</p>
<p>3/30 #6</p>	<p>Beginning: <b>Very worried</b> End: <b>Confident</b> Prompt: 5 Title: The Slump Did SI Help: <b>yes</b></p> <p>Used them, “I didn’t even realize. [I was using the technique].”</p> 	<p><b>SI and error script independent:</b></p> <p>Blue Monster: So first I’m going to start off with a little bit of that. Teacher : All right. What would you call that? Blue Monster: Lines. Squiggle. It looks like an octopus’s head. Then for this one, this one’s going to be more of an elegant one. I already lined it up wrong. I’ll turn it into something. Is that black? Teacher: Test it on here and see what it looks like. I think it’s a red. Blue Monster: I love that color. Perfect. And then I do love this color. So now I’m going to make it cool. That’s a pinky. Can you feel that? That’s a magenta or whatever color it is. I think it looks magenta. Teacher : It’s in the magenta family I would say. One of the darker ones. One of the red family. Blue Monster: And I put the box here because I think black and blue looks awesome together in my opinion. I love black and blue. Teacher : They do have nice contrasts next to each other. Blue Monster: Yeah. So now what I’m going to do. I don’t know what I’m going to do. So we’re going to test things out. I don’t even know why I did this like this brown, but it kind of looks kind of neat. Now I’m going to go with a green and probably – first I want to make like a separating line right there. I think that will look actually kind of cool and kind of like – it’s kind of like the Y and X axis, but there’s more than just Y and X. [Pause, silence] I like this. Yeah. I’m loving how this is turning out actually. Especially like the drip. Teacher : I’m glad. It certainly has a lot of texture already. Blue Monster: So I’m just like going to color into there. The purple is not going to have too much because I’m not loving the purple with the yellow. It doesn’t really match. That’s smearing a little bit. We can make it work. That’s what I’m going to do. I should have made some more drips. Let’s see what this looks like. That’s cool. So I’m going to do that right after I do this. Just drawing a big black line right there and then I’ll fill then in purple even though I don’t like it. Just because it’s not really a lot of purple. So I’m trying to be fair. Teacher : I like that you’re trying to be fair to the colors. I feel like that’s something I would say. I can relate to that. Blue Monster: Oh. [made an extra line he didn’t intend for] What can I do? Move the line out. Just like that a little. Not really a big difference at all when it’s gone. Teacher : There you go. Blue Monster: Even though it’s a littler line it doesn’t matter that much. Oh, I like that color a lot. I’m probably going to stop this color right at there. I’m trying to do half of this little drip right there probably. Yeah, that’s probably where I’m going to stop. I’m going to start drawing a black because that</p>

		<p>looks really cool, I think. What color is next? That's next. This is a cool color. I'm just going to leave that little bit for another time.</p> <p><b>Name of work:</b></p> <p>Blue Monster: It's kind of like a slump of lava. Teacher : Oh, cool. Blue Monster: I feel like different colors just bursting through the air.</p> <p><b>Reflection:</b></p> <p>Blue Monster: Do I think [reading reflection question] I didn't really use them because I just pretty much liked it throughout the whole thing. Teacher : Let's think...I was listening, you did actually like, the whole time? You can use the technique when you are feeling good. Think back, did you use them? Did you talk through your decisions and ideas? I know I heard you. Blue Monster: I did? In the beginning? Teacher : I heard you use them throughout the whole thing. Blue Monster: Really? Teacher : Did you not realize? That's kind of a good thing. Blue Monster: Wait. Teacher : You don't have to change what you're writing, but I heard you several times when you made little errors that you didn't like, you told yourself wait, I can fix this. I can do something else. And then you told me – you went through your error script and you told me how you were going to fix it. So you might not have realized it, but you were using it which is wonderful. You did that independently. Blue Monster: oh, I did use them. I didn't realize.</p>
4/6 #7	<p>Beginning: A little worried End: Confident Prompt: 15 'I am an artist' Did SI Help: yes</p> <p>Used them in my head</p> 	<p><b>Talking though whether SI was used:</b></p> <p>Blue Monster: I didn't use them. [ SI technique ] Teacher: Well, you used them out loud in the beginning. So you start at the beginning and you told yourself how it was gonna go. And I heard you use it a little bit while you're thinking. Were you thinking about them in your brain? What were you thinking about while you're working because you mostly work silently? Were you thinking about your decisions? Blue Monster: I guess. I'm trying to see what color I wanted. Teacher: Ok. Like, in your brain if you were thinking this is what I'm going to do next and you're telling yourself your steps - Blue Monster: So I guess I can. Teacher: - then you technically did use it because you're at the point that you're mostly independent so I'm not having you talk out loud all the time if you don't need to. Blue Monster: Yes. It helped because..... [paused getting ready to write on reflection] Teacher: So if you were using it in your head where you were just telling yourself what it was then you - technically you did. So whatever you think. I'm just trying to help you think if you knew it, if you think about whether you did or not. If you didn't, that's ok. We just wanted to try to see if we did or not. Blue Monster: I think I probably was. Teacher: Ok. Because you did it subconsciously last time too without realizing it, which I thought was really interesting last time and was - I also</p>

		<p>noticed this time that when you did make an error it didn't bother you too much. And I thought that was pretty cool, too. Did you feel like that was important for you?</p> <p>Blue Monster: Yeah.</p>
4/20 #8	<p>Beginning: a little worried</p> <p>End: Confident</p> <p>Prompt: 15</p> <p>Did SI Help: yes</p> <p>They helped.</p> 	<p><b>During reflection:</b></p> <p>Blue Monster: I didn't use them in the beginning, so I don't know about that. Yeah. And yes they helped later when I did this part. [Points to stripes of color made when he didn't like the color he began with. ]</p> <p>Teacher: Did you notice that you used them when you first changed this and realized that you wanted to change your color?</p> <p>Blue Monster::No.</p> <p>Teacher: You didn't realize you did it? That's good information to know because you did. You did a couple of different times when you were working on this. So when you made something you weren't expecting you didn't realize that it was going to turn out that, but you told yourself that's ok, I can do this or I can change it like this or I'll try it this way. So I'm really glad to hear that because you don't even necessarily know you were doing it and that's what we're working for, right? That's what you were trying to make happen. So I'm glad to hear that - that it's helping. It's wonderful, even if you didn't realize it.</p>
4/25e nd #9	<p>Beginning: A little worried</p> <p>End: a little worried</p> <p>Inspired by last session's drawing</p> <p>Did SI Help: yes</p> <p>They helped.</p> <p>Did not like end result</p> 	<p><b>End reflection:</b></p> <p>Teacher: [ reading self-reflection questions] Right, so how do you feel about your abilities? Not necessarily do or did you like it, it's like how do you feel about your ability to make your artworks in general?</p> <p>Blue Monster : Right there, not good.</p> <p>Teacher: Did you feel like you can't make art anymore?</p> <p>Blue Monster : No. I can. I just don't like this one today.</p> <p>Teacher: OK that's what I wanted to make sure, because if [you don't feel like you can and] that was true that's OK, I just wanted to make sure I knew. Remember this question is asking about if you feel like you can make art.</p> <p>Blue Monster : What about this one? [question 2 ] I mean just put that there ahead of the time. [ Points to where he already wrote 'nope' for question 3]</p> <p>Teacher: You just like writing nope. OK, so you have been using your sentences and strategies today, and you did talk about how you felt. Right?</p> <p>Blue Monster : I did.</p> <p>Teacher: OK. Do you think it was helpful to talk about what you are doing and why you are doing it?</p> <p>Blue Monster : Yes, so then they could help.</p> <p>Teacher: So they helped you feel how?</p> <p>Blue Monster : I don't know. I don't know, just easier.</p> <p>Teacher: It's easier to make things when you're doing it?</p> <p>Blue Monster : Yes.</p> <p>Teacher: OK, we can write that. We did notice today, which is an interesting note, that you didn't like how it turned out, but did you feel OK about not liking how it turned out?</p> <p>Blue Monster : Yes.</p> <p>Teacher: Yes, so you felt OK about it not being something you liked?</p> <p>Blue Monster : Yes.</p> <p>Teacher: That's good; do you think you would have felt that way before?</p>

		<p>Blue Monster : [quickly answered] No.</p> <p>Teacher: Right, so that's a change right?</p> <p>Blue Monster : Yes.</p> <p>Teacher: That's good right? It's a positive change. That's great. I'm glad that you felt okay with it not being exactly what you wanted, that's a wonderful thing. Anything else that you noticed or wanted to say about this or just anything? [Student writes nope on the self-reflection form, Teacher laughs]</p> <p>Nope? All right, just double-checking, because you have the right to talk about your own experience. I don't want to make things up, just trying to make sure I understand what you're thinking so I don't record it wrong.</p> <p>Blue Monster : I think I got a little mad when I didn't do like I liked, so I just started drawing everywhere to see if it helped.</p> <p>Teacher: Yes, I saw you were trying out some new things and you're experimenting. That's okay. You're allowed to be a little mad; I get mad at my work all the time. That's all right. As long as you don't get to be –</p> <p>Blue Monster : Ripping up art.</p> <p>Teacher: where someone is thinking that you no longer can do something when you can. It's to get out of your this whole thing which I'm hoping this will help with in the end is that it will keep you from feeling like you weren't able to just because you don't like something. You know.</p> <p>Blue Monster: Yes, it's kind of in a good way that I didn't draw something I liked.</p>
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**Student self-reflection ratings during Individual sessions**

Before and After using the SI technique.



Great: Very Confident    Good: little worry    Ok: worried    Upset: Very Worried    Badly: Unconfident

\*\*\* When a student has picked more than one rating the lower, or more colored in response is recorded

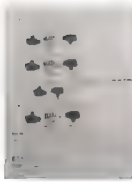
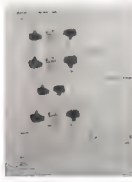


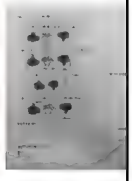
**Blue Monster**

Session #	Before starting	After Self-Instruction
1	Light blue	Green
2	Yellow	Green
3	Green	Green
4	Yellow	Green
5	Green	Green
6	Orange	Green
7	Light blue	Green
8	Light blue	Green
9	Light blue	Light blue

**Blue Monster's In-Class Observations Data Matrix**

\* Highlighted answers indicate that strategy or behavior was observed

Date	2/18	3/1/22	3/9/22	3/17/22	4/4/22	4/19/22	4/27/22 end
Class theme/ objective	Self-portrait on ceramic tile (tradition for 5th grade)	Self-portrait on ceramic tile	Self-portrait on ceramic tile continued	Introduction to Paper cutting techniques from around the world.	Paused on paper cutting traditions project  Time given to finish previous projects	Continued paper cutting traditions project.	Finish paper-cut project
Materials	Pencil and Glaze on ceramic tile	Pencil and glaze on ceramic tile	Glaze on ceramic tile	Color paper, glue scissors	Color pencil on paper	Colored paper, glue, scissors, marker	Colored paper, glue, scissors, marker
Maladaptive behaviors observed	Yes ✓	Yes ✓	No ✓	Yes ✓	No ✓	No ✓	No ✓
Type of behavior	Negative self-talk ✓ Avoidance behavior ✓	Negative self-talk ✓ Avoidance behavior ✓	N/A ✓	Negative self-talk ✓	N/A ✓	N/A ✓	N/A ✓
Keywords in Negative self-talk if over heard	Looks bad Not right Wrong colors Wrong perfect	Colors wrong Needs to be perfect	not perfect	"What if I ruin it?"	n/a	n/a	n/a
Coping technique attempted?	No ✓	Yes ✓	No ✓	Yes ✓	n/a ✓	Yes ✓	Yes ✓
Technique attempted	N/A ✓	Self instruction ✓	N/A ✓	Self instruction ✓	N/A ✓	Self instruction ✓	Self instruction ✓
Accommodation made/ needed	Information packet  Visual schedule	Information packet/guide	n/a	n/a	n/a	n/a	n/a
Teacher perceptions on student independence	Needed teacher proximity for majority of class consistent reassurance  Did not display	Avoiding work at first  Two reminders given then worked independently	Proximity needed to help student get started  Asked for additional help from	Student needed one prompt at the beginning of work time to use SI to reassure himself	Independently selected and finished project for the art show  No avoidance noticed today	Asked for clarification once, teacher checked in with student, but student worked entire class	Teacher checked in at 3 points during class.  Student worked independently

	independence  Avoided beginning work until teacher assistance	Proximity still needed for about ½ the class	teacher	Student was independent the rest of class		independently	or asked suggestions from peers.
Other notes		Reminded student to use the SI sentences  Walked him through the process  After review, the student seemed to need less teacher proximity	Reported he was not worried in class today  Needed less assurance to work through class	Student did not report using SI, teacher helped remind him to reassure himself once during class	Student finished the project in the first 15 min. Used the remaining 25 mins to help others/ organize supplies  Did not show signs of doubt when finishing (this project had been a huge trigger of self doubt earlier in the year)	No avoidance noted today	Student casually talked about the parts he liked and disliked on his project with other students.
Student Reflection notes	N/a - exit ticket not given yet	N/A  Researcher forgot to have student complete this form	Did not use the SI technique today.  Noted he liked his tile project.	Did not feel worried. Did not need to use SI.	Helped others in the class, did not need to use SI technique	No notes left.  Reported using SI, unsure if it helped in class	No notes left.  Reported using SI, and that it was helpful
Student Exit ticket	N/A  Not given yet.	N/A					

**Student Reflection: In-Class self-report**

\* Blank = no answer    N/A if SI not used

Questions asked:

1. I made an artwork today:
2. I felt worried or unsure today when I was making art.
3. I thought about, said, or read the sentences I made to help me if things got hard.
4. If you used your sentences, did they help?

Blue Monster	#1	#2	#3	#4
3/9/22	Yes	No	No	N/A
3/17/22	Yes	No	No	N/A
4/4/22	No	No	No	N/A
4/19/22	Yes	No	Yes	Not Sure
4/27/22	Yes	Not Sure	Yes	Yes

## Interview I

### Interview 1 Questions

1. For the purpose of this study I need to give you an amazing code name to keep your secret identity, do you have a secret code name in mind? If not, do you mind if I pick one for you?
2. I wanted to ask you to tell me a few things that you love to do. Did you have to work hard to learn any of these things?
  - a. Was there ever a time that \_\_\_\_\_ was really hard for you?
  - b. What did you do?
3. What do you think about making, or looking at art?
4. Do you ever make art outside of school? If so, what kind?
5. Do you think art is something everyone can do? Why or why not?
6. I want to talk to you about our art class. How do you feel about the work you do in art class? Why do you feel that way? We can look at your most recent artwork if you want to.
7. Do you ever feel worried in art class about your abilities?
8. Would you call yourself an artist? Why or why not?
9. What do you do when you get too worried or stressed?
10. Are there any art activities you really do not like? If so, which materials frustrate you? What about them frustrates you?
11. Do you think the way you feel about art or making things can change?

### Blue Monster Interview I

Question #	Keywords and phrases	Quotes
1	Blue Monster	
2	Play sports, basketball, football, tennis, Art	
2a	yes	
2b	Kept working Tried harder	"Just tried harder. And I just kept working on it, and then I got it."
3	Looking: not really interested  Making: yes - enjoys it Colors Expression	"Making it, I really like making it. Because I like all the colors, and I like expressing in my art."  "If I made it and I liked it, I would look at it. But I wouldn't look at it – I wouldn't just stare at it. I don't love looking at art. I like making it."

4	<p>Mostly in school Sometimes Time (basketball takes a lot of time)</p> <p>Art : lines, abstract drawings, reactive drawings</p>	<p>“I like to I usually can draw lines, and then it turns into things in my head.”</p>
5	<p>Yes - but need: focus, practice, try, time</p>	<p>“If they put time into it. If you don’t care or try, then you’re not going to get really much done.”</p>
6 and 7	<p>Doubt Better Perfect Annoying Can’t</p> <p>Frustrated</p>	<p>“Sometimes I doubt it. But after I just like go through it and try to make it as better as I can. Like the best I can.”</p> <p>Teacher: So is there a particular reason why you think you might doubt yourself at times?</p> <p>“Yeah. Because I really like to have things perfect. And if it doesn’t, it’s very annoying.”</p> <p>Teacher: OK. Can I ask you what perfect would really be like?</p> <p>“Just everything the way I want it to be. But it can’t be.”</p> <p>“ I think I I feel like I have the ability to. But sometimes when I just don’t get it on the first try, I just get frustrated.”</p> <p>Interviewer: Do you think that holds you back sometimes? That feeling?</p> <p>“Kind of. Like 50-50.”</p>
8	<p>Not yet Not enough experience</p> <p>Loves art Puts work and effort in</p>	<p>“ Probably not yet, because I don’t have enough experience to call myself an artist yet. I would consider my dad an artist.”</p> <p>Definition of an artist: “ Someone who loves art, and does it all the time. And puts a lot of hard work and effort into it.</p> <p>Teacher: OK. Why would you say maybe you’re not, then?</p> <p>Blue Monster: Because oh. I guess I just contradicted myself.”</p>
9	<p>Tough to think of Physical movement</p>	<p>“ I usually put my hands in my pockets, and just clench my fists.</p> <p>Teacher: OK. So you do some physical things to help you. All right, cool. Is there anything else that you sometimes try to do?</p> <p>Blue Monster: Not that I’m aware of.”</p>
10	<p>Disliked: crayons, oil pastel, - too messy or in accurate</p>	

	drawing/coloring  Go all over No precision	
11	Change Future  Getting everything right Middle	“ I mean, anything can change, so.”  “It’s not the future yet.”  “ I’m not sure. Because, just because you get better at art doesn’t mean that you still won’t get –that you’re still going to get everything right. So you still get frustrated. So, I think I’m kind of in the middle there. I don’t know.”
<b>Words associated with self-doubt:</b>	Perfect Best Annoying Can’t Frustrating	

## Interview II

1. The last time I asked you to tell me about your ideas, you told me you thought art ( is or is not) something everyone can do. Do you still think that is true? Why or why not?
2. How are your feelings about art right now? Do you think you can make art? Why or why not? We can look at your most recent artwork if you want to.
3. We have been working together to create helpful self-statements or helpful sentences by writing, reading, and thinking about what we are doing, and what we can tell ourselves when making art gets hard or we start to worry. I want to ask you a little more about that if that is ok?
  - a. We have been trying to look and listen carefully to the words we use when we are working to make sure the words we use to talk to ourselves are kind and helpful. Do you think it is important to think about the words we think and say about ourselves?
  - b. How did you feel about writing your own self-statements or ‘helpful sentences’? Was this really hard for you to do? Did it get easier to do with practice?
  - c. Do you think repeating these sentences out loud or in your head when you make art is helpful? Why?
    - i. If a student mentions or infers the use of an error script: I think you are talking about making an error script. When we dislike how things are going or make a mistake and talk about it and how it could change, we are using our sentences to correct an error. Did you find error scripts helpful?
  - d. You reported trying/ not really using this technique in regular art class, how did you feel about using your self-scripts in class?

- e. Have you tried, or will you try, this technique when you make artwork at home or for any other reason?
4. Was there an art activity prompt that we have done that you really liked and made you feel good or confident in your abilities? Why do you think it made you feel that way?
5. Are there any art activities we did during one of our weekly sessions you did not like? If so, what made you dislike it?
6. Do you think any of the things we have been practicing, like making small artworks, practicing self-statements, and trying to change our words, have been helpful?
  - a. Have you noticed any changes in your feelings or ability to get started?
7. Do you think you can or will still use this technique now that the study is over?

### Blue Monster Interview II

Question #	Keywords, ideas and phrases	Quotes
1	Try Anything is possible  Have to try	<b>Is art still for everyone?</b>  Blue Monster: I do because if you just try you can do it. Teacher: OK, so you still feel like that, like that's a valid thing? If you work for it, it's still possible? Blue Monster: For anything.
2	Did not like the artwork made last session. Got mad. Scribble a little then fixed. Experiment  Still didn't like it but finished it  Developed personal style over time  Opinions changed because he improved and developed	<b>How are your feelings about art right now?</b>  <b>Perseverance:</b> Blue Monster: I remember last class last session that we did this, I didn't like it the first time and I completely restarted it I think. Teacher: No you didn't restart it; you did some experiments on it. Blue Monster: Yes, I did experiments on it. And I basically I got really mad for a minute and I just kind of scribbled on it in the corner but I changed it. Teacher: But you didn't throw it away? You didn't actually scribble or destroy it; and you made sure you finished it even if you just didn't like it much. I remember that now. Blue Monster: I like that one, I like that one. That one was awesome. That was good. [referring to 'I am an artist' artwork made week 8] Teacher: This is the one that you didn't like in the end? Blue Monster: No. Teacher: But you still didn't give up. Blue Monster: No.  <b>Talking about style development:</b> Blue Monster: – this was one of my favorites. This one might have been my favorite. Teacher: And this one you called The Slump. Blue Monster: Yeah, that one was cool. Teacher: I'm not sure that you got to finish that one. Blue Monster: This one?

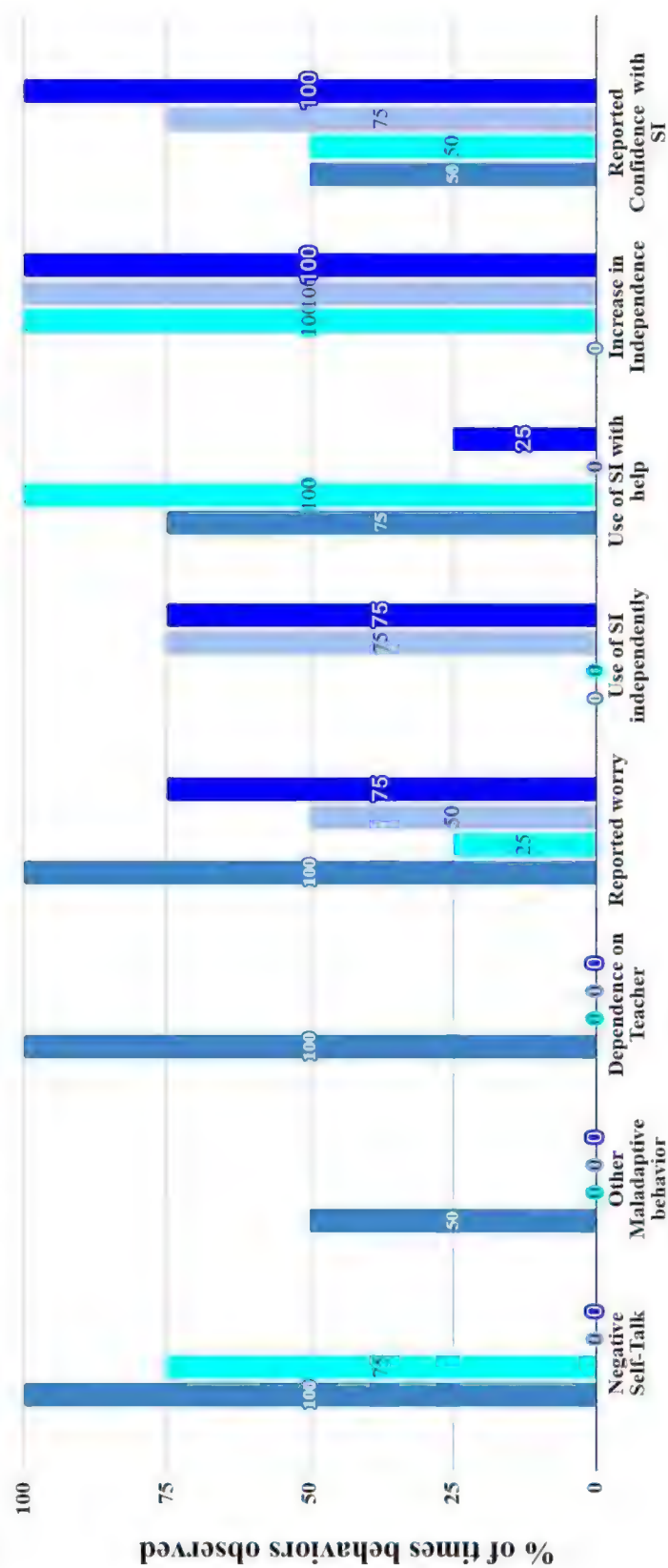


	his style	<p>Teacher: Yeah, I don't remember if you did finish that officially.</p> <p>Blue Monster: I think I did, and I really like this one. I think it's just cool patterns.</p> <p>Teacher: That's cool. That was an experimental one too [laughs].</p> <p>Blue Monster: I think I liked this one at the time –[Art from session 4 'Nest']</p> <p>Teacher: Yeah, not all of these were finished.</p> <p>Blue Monster: – I don't really like anymore, because it's like – just like not – I could do better.</p> <p>Teacher: OK that's OK. You're allowed to change your mind on artwork.</p> <p>Blue Monster: I liked in the beginning because I wasn't as because I've gotten better at I feel like.</p> <p>Teacher: OK, so you feel like you've gotten better in your own style, is that what you mean?</p> <p>Blue Monster: Yes.</p> <p>Teacher: Yeah, you definitely explored your own style and seem to stop – at least in my view, it seems like you stopped trying to draw like someone else? Or trying to copy other people; it feels like you really embraced your own style.</p> <p>Blue Monster: Yes, because you know like sometimes we have to do other styles of artwork in class, I would rather just draw in my own style.</p> <p>Teacher: Well I've still got to teach you other stuff too [laughs].</p> <p>Blue Monster: And then if I like it then –</p> <p>Teacher: But there's always a way.</p> <p>Blue Monster: it could become part of my own style.</p> <p>Teacher: Yes, there's always a way for other things to influence you. So, it seems like overall you like how you've progressed with your style at least in this study, so that's cool. It seems like you still feel pretty positive about it, is that true?</p> <p>Blue Monster: Yes</p>
3 a		<p><b>Is it important to think about the words you use?</b></p> <p>Blue Monster: Yes.</p> <p>Teacher: Can you expand on that anymore? Why do you think it's important? What are your opinions?</p> <p>Blue Monster: Because if you talk about it, or yourself in a negative way, you can feel sad about yourself.</p> <p>Teacher: OK, so you think the way you talk to yourself influences your feelings, is that what you're saying? [nods] OK. I try very hard to make sure I do put my words in other people's mouths.</p>
3b	<p>Easy to write them and think them at first</p> <p>Just nice things</p>	<p><b>What were writing self-statements like?</b></p> <p>Blue Monster: You mean like when we were first writing them down?</p> <p>Teacher: Yes.</p> <p>Blue Monster: No, that was easy.</p> <p>Teacher: You thought it was easy to come up with some of those phrases?</p> <p>Blue Monster: Yes, because it's just nice things.</p>
3c	<p>Yes</p> <p>Student does not realize when he is using SI</p>	<p><b>Do you think repeating them out loud and in your head was helpful?</b></p> <p>Teacher: Do you think that was helpful, to tell yourself before you started?</p> <p>Blue Monster: Yes. Because I'm saying something positive.</p> <p>Teacher: So it's like a way to start?</p> <p>Blue Monster: Yes,</p>

	most of the time	<p><b>Error statement use:</b></p> <p>Teacher: Another thing I noticed, because I noticed in the last couple of sessions, particularly that when you made some lines or you use the color choice that you didn't expect, and it was technically like an error or something that could bother you, and even when you started not really liking how your one artwork turned out, I notice that you started talking through your decisions to change things over and to reaffirm that things were OK. Technically, you are using an error script and it seems like that was something that was becoming something that you don't really notice you did, would you agree with that?</p> <p>Blue Monster: Yes.</p> <p>Teacher: I thought that was kind of amazing. Because that means that your brain was really looking out for you there. So, did you find that doing that was helpful for you when you did realize that you were sort of correcting your area and navigating –</p> <p>Blue Monster: Probably.</p> <p>Teacher: through that? If there were any times that you did realize what you are doing?</p> <p>Blue Monster: I don't think so, I never really noticed. Not until you pointed out when I did it so.</p> <p>Teacher: So you didn't usually realize it until [I brought up that I heard you]?</p> <p>Blue Monster: Yes.</p> <p>Teacher: Looking back do you think that was probably helpful? Do you think that's reassuring?</p> <p>Blue Monster: Using them? Yes, probably was. I didn't stop so.</p>
3d	<p>Haven't needed it</p> <p>Haven't been frustrated.</p> <p>But if I get frustrated I will probably use it.</p>	<p><b>How was using it in class?</b></p> <p><b>So have you been trying to use this technique in your head during our regular art classes?</b></p> <p>Blue Monster: Yes.</p> <p>Teacher: Has that been helpful in art class do you think?</p> <p>Blue Monster: In art class?</p> <p>Teacher: Yes. Just during our regular classes.</p> <p>Blue Monster: I haven't really used it in art class much. Because in the art classes we haven't really done anything too difficult and I haven't gotten frustrated.</p> <p>Teacher: Yes, I've noticed that you felt like you – in some of our exit ticket reflections, that you mostly sort of felt like you didn't need to use them then. Do you think you will use them in the future if you need to?</p> <p>Blue Monster: In what, art class?</p> <p>Teacher: Or any class.</p> <p>Blue Monster: If I get frustrated, then yes probably.</p>
3e	Used to help during basketball	<p><b>Have you used SI at home or elsewhere?</b></p> <p>Teacher: Have you ever tried to use it for other areas?</p> <p>Blue Monster: Yes.</p> <p>Teacher: Really? Can you tell me about that a little bit?</p> <p>Blue Monster: In basketball. When I'm playing basketball I use them sometimes.</p> <p>Teacher: OK, that's great. Do you feel like that's been helpful?</p> <p>Blue Monster: Yes.</p>
4	Open-ended	<b>Was there an art activity you really liked?</b>

	ones that could be anything	
5	No they were fine	<b>One you really didn't like?</b>
6	n/a skipped accidentally	Do you think any of the things we have been practicing, like making small artworks, practicing self-statements, and trying to change our words, have been helpful?
6a	Thinking about what I'm doing  Actually doing what I want.	<b>Have you noticed any changes in your feelings or ability to get started?</b>  Blue Monster: Yes, I'm just thinking about what I'm doing and then I'm showing I'm actually doing what I want to do instead of messing it up. Teacher: So you're being more thoughtful, is that what you're saying? Blue Monster: Yes. Teacher: You're thinking through what you are doing so you don't feel like you mess up? Blue Monster: Yes.
7	Earlier - said he would use it when frustrated  Can be used elsewhere	<b>Will you continue to use this now the study is over?</b>  Blue Monster: I think I can probably use it in other places.

### Blue Monster Observed Trends

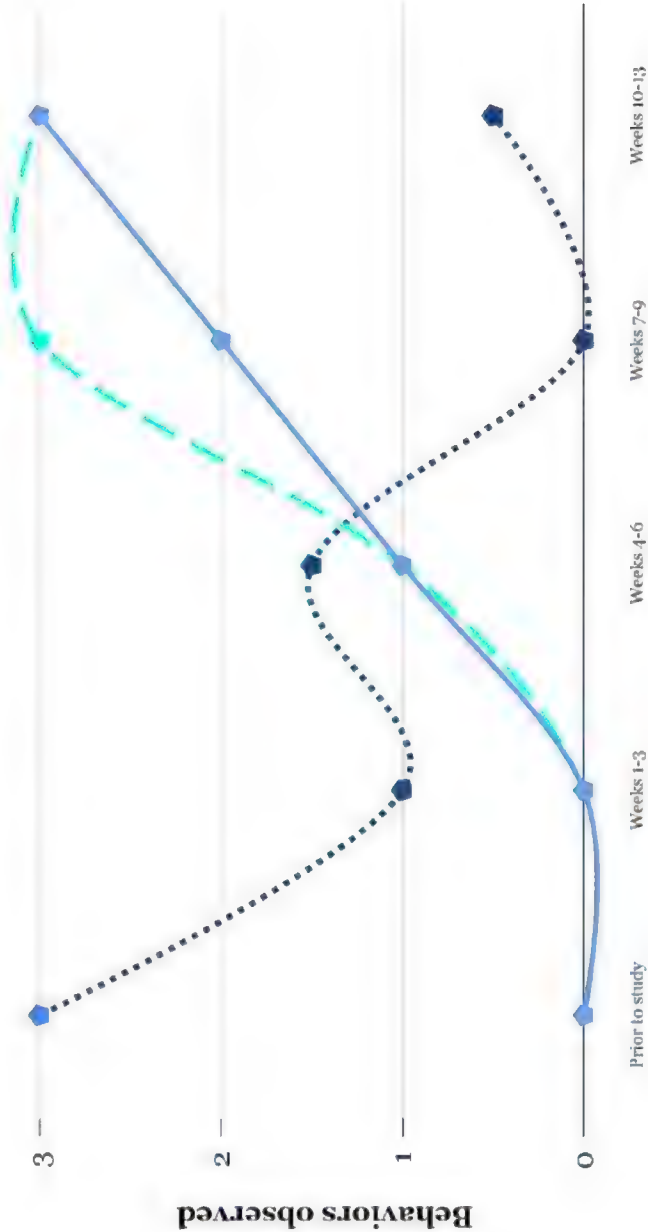


During the weeks of:

■ Feb. 18th - March 2 ■ March 9th - 17th ■ March 21st - April 6th ■ April 19th - 27th

# Blue Monster Participation in SI and Observed Changes in Behavior and Independence

0 = Not observed 1 = Observed some 2 = Observed Majority of the time 3 = Observed all the time

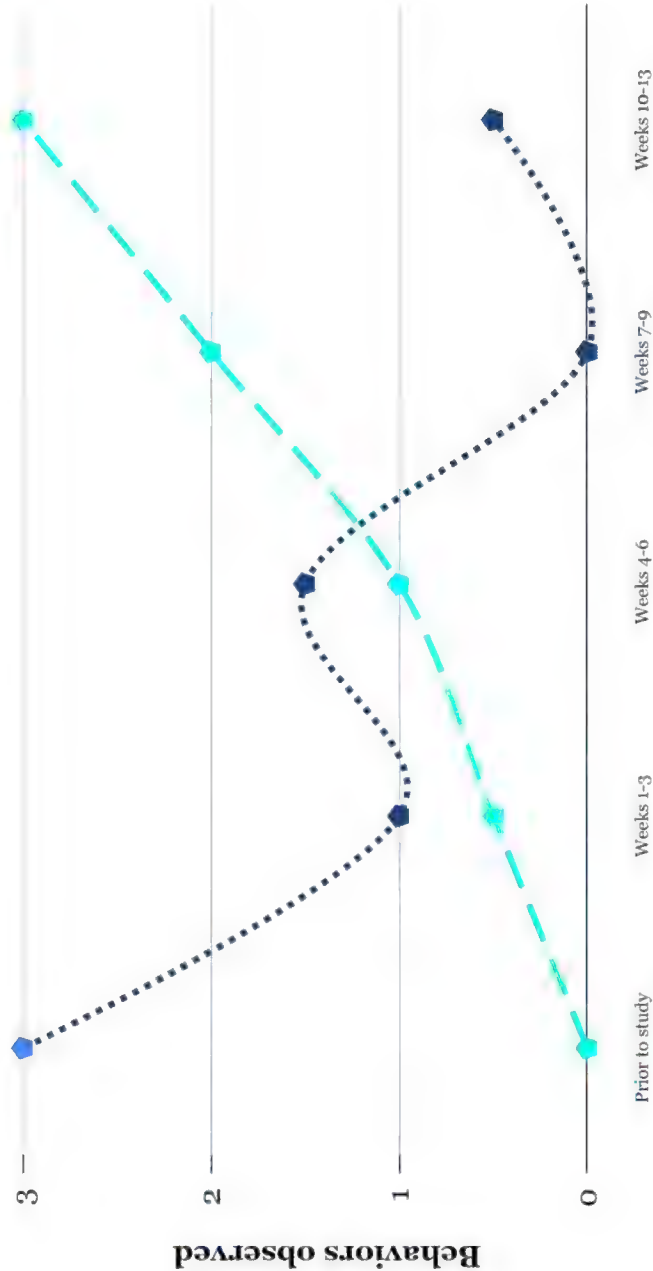


Observations During the Study

- Blue Monster use of negative self-talk
- Blue Monster use of SI
- Blue Monster Independent problem-solving

# Blue Monster Participation in SI and Observed Changes in Confidence and use of Negative Self-talk

0= Not observed 1= Observe some 2= Observed Majority of the time 3= Observed all the time

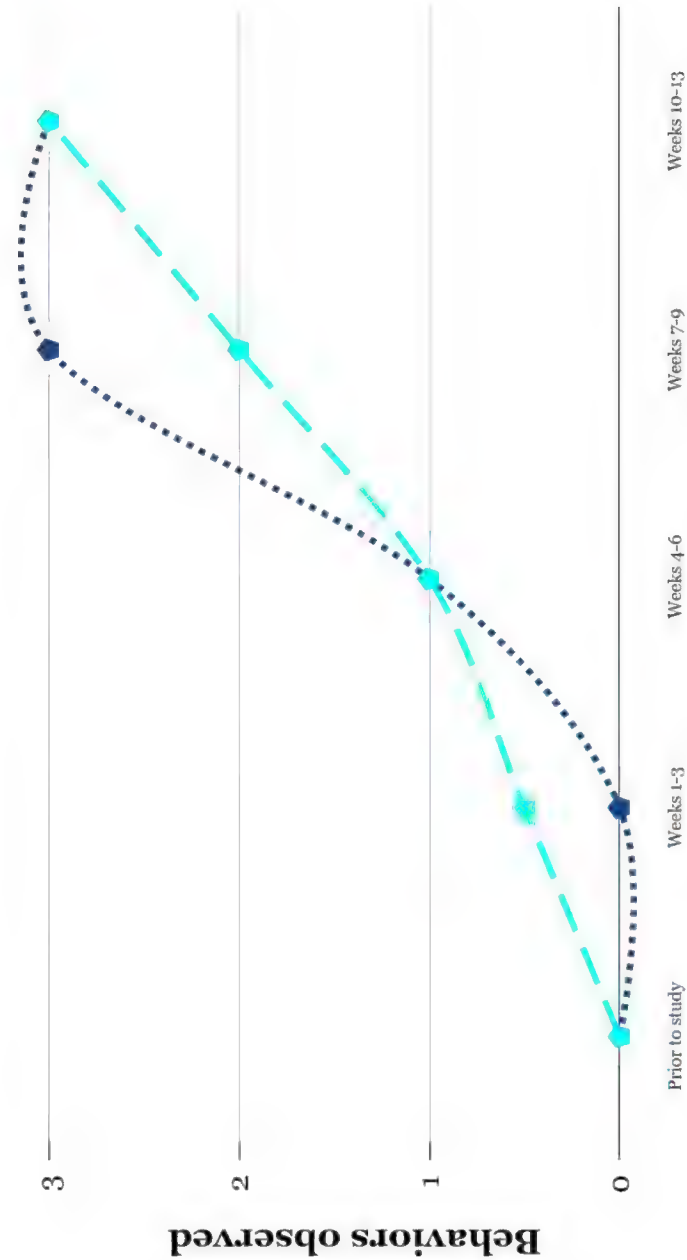


Observations During the Study

- Blue Monster use of negative self-talk
- Blue Monster Reported Confidence

# Blue Monster Participation in SI and Observed Changes in Confidence

0= Not observed   1= Observe some   2= Observed Majority of the time   3= Observed all the time



Observations During the Study

◆ Blue Monster use of SI   ◆ Blue Monster Reported Confidence

Photo Log, Observational Protocol  
Student name: Blue Monster

#	Date	Type	Photographs and Notes
1	2/23/22	1	 <p>Session 1 prompt 3</p> <p>Hand-drawn picture of a blue monster with a long, wavy body and a small head, sitting on a yellow background. The drawing is on a piece of paper with a grid pattern.</p>
2	3/3/22	1	 <p>Session 2 part 1 prompt 7</p> <p>Hand-drawn picture of a blue monster with a long, wavy body and a small head, sitting on a yellow background. The drawing is on a piece of paper with a grid pattern.</p>







ID	Date	Type	Photographs and Notes	Date	Type	Photographs and Notes
7	3/21	I	 <p>Session 5 prompt 4 - mandala</p>	3/30/22	I	 <p>Session 6 prompt 5</p>

#	Date	Type	Photographs and Notes
9	4/22	C	
10	4/6	I	 

#	Date	Type	Photographs and Notes
1	4-19	C	 <p>The photograph shows a worksheet titled "Blue Monster". The instructions are: "1. Draw a picture of a monster who is blue." Below this, there are four small drawings of blue monsters, each with a "Yes" or "No" label. The first monster is labeled "Yes", the second "No", the third "Yes", and the fourth "No". The worksheet also has a section for "2. Draw a picture of a monster who is not blue." and a section for "3. Draw a picture of a monster who is not blue." and a section for "4. Draw a picture of a monster who is not blue." The name "Aige" is written at the bottom.</p>
2	4-20	I	 <p>The photograph shows a worksheet titled "Session 8 prompt 15 continued". The instructions are: "1. Draw a picture of a monster who is not blue." Below this, there are four small drawings of blue monsters, each with a "Yes" or "No" label. The first monster is labeled "Yes", the second "No", the third "Yes", and the fourth "No". The worksheet also has a section for "2. Draw a picture of a monster who is not blue." and a section for "3. Draw a picture of a monster who is not blue." and a section for "4. Draw a picture of a monster who is not blue." The name "Aige" is written at the bottom.</p>

Blue Monster's Photo log \*Type of session I- Individual Session, C- Class Session





#	Date	Type	Photographs and Notes
1	4.27	C	
5	2.2		
1	5.2	I	
6			

**APPENDIX F: Triangle's Coded Data****Triangle's Timeline**

C- In-class data

SI - Individual Session 15 observations

3/2	3/3	3/9	3/11	3/16	3/21	3/29	3/30	4/6	4/6	4/20	4/21	4/27	5/4	5/9
SI 1	C	SI 2	C	SI 3	C	C	SI 4	C	SI 5	SI 6	C	SI 7	SI 8	C

**Timeline Key**

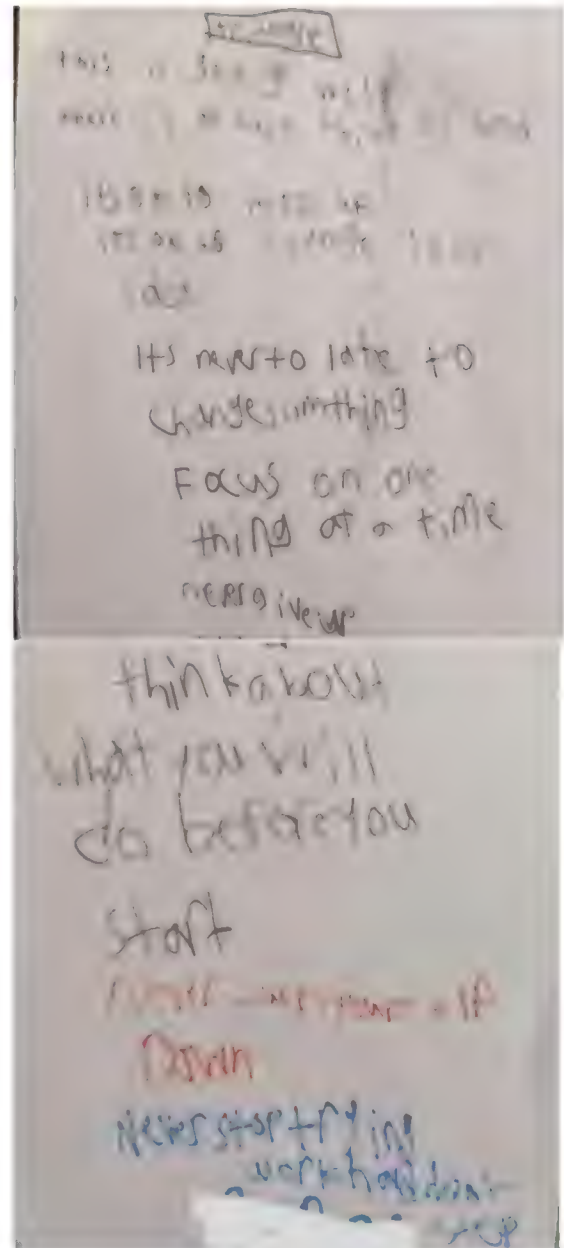
Observed or Reported instances of:

Negative Self-talk	Other Maladaptive behavior	Reported worry	Independent problem solving and reassurance	Dependence on teacher to reassure and support problem solving	Positive report of change after SI use/ SI was helpful	SI used with help	SI used independently
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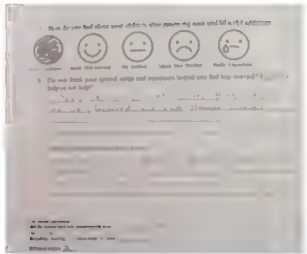


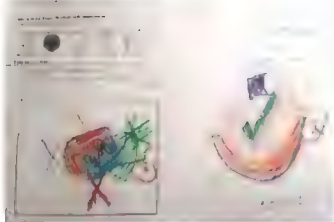





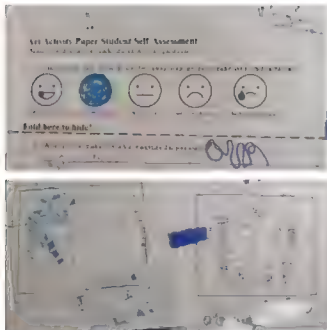
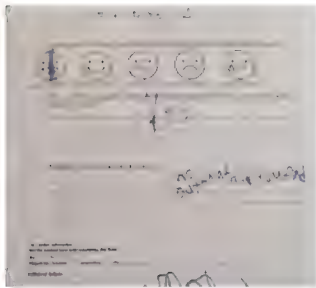
**Triangles Written Self-Statements**

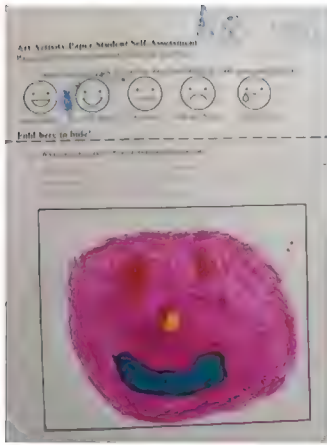
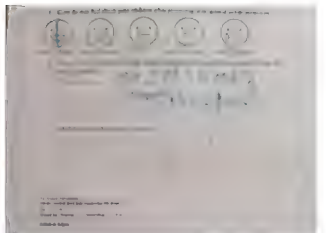


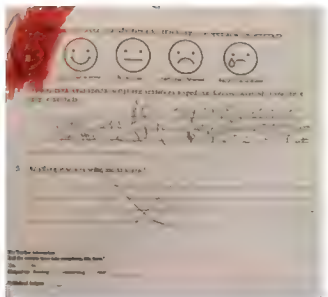
Triangle
This is going well.
There is no such thing as bad.
It's okay to mess up.
It's okay to change your idea.
It's never too late to change something.
Focus on one thing at a time.
Never give up.
Think about what you do before you start.
Never turn yourself down.
Never stop trying.
Work hard and don't stop.



**Triangle SI Training Self-Reflection matrix**

Date	Session #	Key Points and words	Beginning	After Using SI
3/2	1	<p>Beginning: A little Worried</p> <p>End: Confident</p> <p>Prompt: 5</p> <p>Used: oil pastel, pencil</p> <p>Did SI Help: yes</p> <p>Describing</p> <p>Stay focused</p> <p>Stronger choices</p> <p>Maybe good when alone</p>		 <p><b>* teacher scribed second page only</b></p>
3/9	2	<p>Beginning: a little Worried</p> <p>End: Confident</p> <p>Prompt: 1</p> <p>Used: watercolor paint</p> <p>Did SI Help: yes</p> <p>'I don't know how to explain it'</p>		
3/16	3	<p>Beginning: A little worried</p> <p>End: Confident</p> <p>Prompt: 11</p> <p>Used: Crayon, pencil, additional papers</p> <p>Did SI Help: yes</p> <p>"Drawing helps me feel better"</p> <p>Saying what you are going to do first improves work</p>		 <p><b>* teacher scribed for student</b></p>










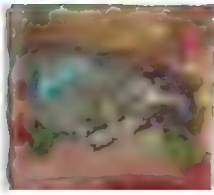

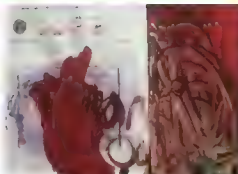
3/30	4	<p>Beginning: <b>Confident</b> End: <b>Confident</b></p> <p>Prompt: 2 Used: Marker, pen, paint</p> <p>Did SI Help: <b>yes</b></p> <p>Helps plan</p> <p>Planning Fuels confidence</p>	 <p>* Participant changed the self-talk of the smiles in the 'before' scale</p>	
4/6	5	<p>Beginning: <b>a little worried</b> End: <b>Confident</b></p> <p>Prompt: 14 Used: marker, pen</p> <p>Did SI Help: <b>yes</b></p> <p>Not sure why</p>		
4/20	6	<p>Beginning: <b>A little worried</b> End: <b>Confident</b></p> <p>Prompt: 4 Used: blue pens</p> <p>Did SI Help: <b>yes</b></p>		

4/27	7	<p>Beginning: a little worried</p> <p>End: Confident</p> <p>Prompt: 4</p> <p>Used: marker/pen</p> <p>Did SI Help: yes</p> <p>“they kind of helped, I don’t know how.”</p>	 
5/4	8	<p>Beginning: a little worried</p> <p>End: Confident</p> <p>Prompt: free choice sport logo 76ers</p> <p>Used: marker</p> <p>Did SI Help: yes</p> <p>“When I used them it helped me get better at drawing.”</p> <p>Focus and allowed planning and thinking through the process</p> <p>*Verbal remarked that this was the best drawing he thought he has made of this logo in a long time</p>	<p>* attempted 1 figured things out and planned for a new version</p>  <p><b>Finished</b></p>  

**Triangle SI Sessions Observational and Transcription Data Matrix**

Date	3/2/22	3/9/22	3/16/22	3/30/22
Session	1	2	3	4
Prompt #	5	1	11	2
Materials	Oil pastel, pencil	watercolor	crayon , pencil, paper	Marker, pen, paint
Maladaptive behaviors observed	No	Yes	No	No
Type of behavior	N/A	Negative self talk	N/A	N/A
Negative self-talk if used	n/a	'It's not too bad' - not being used in a negative way but is self-depreciative alludes it usually is or will, or is a little 'bad'	n/a	n/a
Non verbal signs of self-doubt	Frown Pause	n/a	Pausing and starting for a few moments	Putting down materials
SI technique used with:	Help	Help	Help	Independent
Observed or reported results while using SI	<p>Naturally picked up on this process needed some reminders to continue to talk through decisions</p> <p>Very quick to reassure himself that 'that is ok' when errors are made. Not sure yet how to use SI to create a solution without the teacher guiding him.</p> <p>Talked through his artwork using SI to help make artwork feel more complete</p>	<p>Today was experimental</p> <p>Used SI to talk though ideas for adding making with watercolor paint</p> <p>Very narrative No error script needed</p> <p>Tried to have triangle stop using the phrase 'not too bad' not sure that will ever be possible, he has been saying it since kindergarten.</p>	<p>Still only needing minimal help utilizing technique</p> <p>SI seems to be allowing the student to give himself 'permission' to go with the flow of things, artworks becoming more stream of consciousness at times</p>	<p>Becoming more independent, needed minimal reminders to use SI, I interrupted mostly to comment on small details or to help find materials</p> <p>Beginning to use SI more covertly in his head and in whispers.</p> <p>Still hearing 'not bad' being used as a positive - I would love to break this habit</p>
Other coping techniques attempted	n/a	n/a	Repetitive use of line/ movement to help focus	Repetitive lines - focus












Other Observations	<p>Asked for teacher opinion often for reassurance of thoughts about what to do next.</p> <p>The announcements can not be turned off during dismissal so we have to try not to let it distract us.</p>	<p>Did not appear worried during art making, initially worried by the prompt</p> <p>Purely experimental utilized SI to reassure choices</p>	<p>Student used repetitive lines in his work or to add texture while he thought of what to add next.</p> <p>Reported that it helped maintain focus</p>	<p>Triangle changed the self-talk of the ability rating scale smiley faces on his paper to make them feel more confident in themselves too.</p>
Self-reflect on Before starting	 Good: little worried	 Good: little worried	 Great: Confident	 Good: little worried
Self-reflect on after using SI	 Great: Confident	 Great: Confident	 Great: Confident	 Great: Confident
Work at the end of the session				
Keywords used in session or reflection	What do you think Is it good? It's ok	Not Too bad		No bad In my head

## Triangle Continued


Date	4/6/22	4/20/22	4/27/22	5/4/22
Session	5	6	7	8 End
Prompt #	14	4	8	Choice: 76ers
Materials	Marker, pen	Blue pen	Pen, markers	marker
Maladaptive behaviors observed	No	No	No	No
Type of behavior	N/A	N/A	N/A	N/A
Negative self-talk if used	n/a	n/a	n/a	n/a
Non-verbal signs of	Tence Change in grip	n/a	n/a	frowning

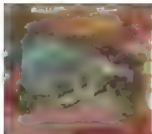

self-doubt	Putting down materials for a moment			
SI technique used with teacher help or independently	Independent	Independent	Independent	Help - some teacher help- unsure he was allowed to try again
Observed or reported results while using SI	<p>Independent use of error scripts</p> <p>Student asked for less teacher reassurance about how his work looked, reaffirming that things look good for himself.</p>	<p>Used SI to observe and make changes when materials stopped working</p> <p>Using SI it seems as a way of making stream of consciousness drawings and affirming the choices he made</p>	<p>Began using SI to talk through ideas and relationships of colors to emotions to help affirm ideas and relation to the prompt.</p> <p>Students mostly practiced this in whispers and covertly today so I had to rely on his end statement reflection</p> <p>He said it was helpful but not sure why.</p>	<p>Student felt drawing was not immediately successful, and continued to preserve and work to see it change.</p> <p>Vocalized several areas where he could have done things differently, but reassured himself it was ok.</p> <p>Asked for another paper and remade project using the info he gathered by continuing his first artwork</p>
Other coping techniques attempted	n/a	n/a	n/a	n/a
Other Observations	<p>Returned to a more figurative work today</p> <p>Looking back at self-statements written during perceived moments of doubt.</p> <p>Noticed: Successfully working to avoid using negative self-taught during each session so far.</p>	<p>Responsive drawing style - responding with marks based on the mark made before it</p> <p>Looking back at self-statements written during perceived moments of doubt.</p> <p>Noticed: Successfully working to avoid using negative self-taught during each session.</p>	<p>Student saw his artwork in file and spoke positively about the person who made them - pretending he did not know it was himself- built himself up and talked about his abilities as a good 'drawer'</p> <p>More figurative work today .</p> <p>Noticed: Successfully working to avoid using negative self-talk during the session so far.</p>	<p>Less experimentation more focused drawing today</p> <p>Admitted that he did not like his work, and that he knew he shouldn't say he was 'bad' at making it - asked to try again after finishing the first version.</p> <p>Used his first drawing to inform his new drawing - learning from practicing</p> <p>Looks at self-statement sheet often</p>

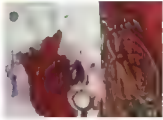
Self-reflection Before starting	 Good: little worried	 Good: little worried	 Good: little worried	 Good: little worried
Self-reflection after using SI	 Great: Confident	 Great: Confident	 Great: Confident	 Great: Confident
Work at the end of the session				 <b>Finished</b> 
Keywords used in session or reflections	Meant to be Feels good helpful		Good	


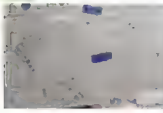



## Triangle SI Training Examples and Quotes Matrix

Date	Overview of self-assessment	Quotes and Examples of students experiences with SI technique
3/2 #1	<p>Beginning: A little Worried</p> <p>End: Confident</p> <p>Prompt: 5</p> <p>Used: oil pastel, pencil</p> <p>Did SI Help: yes</p> <p>Describing Stay focused</p> <p>Stronger choices</p> <p>Maybe good when alone</p> 	<p><b>Attempting SI technique:</b></p> <p>Triangle: It's going pretty out of the lines, but that's OK.</p> <p>Teacher: Because you can do what?</p> <p>Triangle: Fix it.</p> <p>Teacher: How?</p> <p>Triangle: I don't know.</p> <p>Teacher: If it's out of the lines can you make new lines?</p> <p>Triangle: I guess. Even though it's pretty big. That can work. I'm just going to keep that white. And then I'm going to draw my shorts. Then the legs. OK, so then I'll color them in. So my shorts are also black. OK, so then I'll color in my legs. Are they tan?</p> <p>Teacher: Maybe.</p> <p>Triangle: That works. Oh wait, I need that, too. I think this will work. Doesn't really work the best, but it was fine. I can smear it around, oh that's too much.</p> <p>Teacher: So if it smeared your colors, is there a way that you can un-smear it with oil pastels?</p> <p>Triangle: Swirl it around</p> <p>Teacher: That's a good solution.</p> <p><b>Looking for assurance:</b></p> <p>Triangle: Is there anything else I should add?</p> <p>Teacher: That's up to you.</p> <p><b>Reflection:</b></p> <p>Teacher: So while we are doing this how do you feel about your ability to make art now that we've practiced this?</p> <p>Triangle: I think I'm pretty good.</p> <p>Teacher: Has it changed or is it the same? Which circle would you pick?</p> <p>Triangle: I think it's this.</p> <p>Teacher: Ok, so you'd go to the pretty confident one?</p> <p>Triangle: Yeah.</p> <p>Teacher: OK. So that was a change. Do you think that your special script which is these sentences and talking out loud to yourself while you're working helped you feel less worried?</p> <p>Triangle: Yeah, I think so. I think that was part of it.</p> <p>Teacher: How do you think it helped you if you can describe it, if you have an idea of a way you can describe it.</p> <p>Triangle: I think describing the things helped me make my art pretty better because I knew what I was doing. I wasn't just saying it in my head. So describing what I was doing helped me stay focused.</p>
3/9 #2	<p>Beginning: a little Worried</p> <p>End: Confident</p> <p>Prompt: 1</p>	<p><b>Explanation of too bad:</b></p> <p>Triangle: I don't really understand how this is going, but it doesn't seem too bad.</p> <p>Teacher: Does it feel like it's going well?</p>

	<p>Did SI Help: yes</p> <p>‘I don’t know how to explain it’</p> 	<p>Triangle: Yeah.</p> <p>Teacher: OK. Because you keep using the word too bad, it doesn’t feel too bad. So I’m not sure what that means, so I was wondering.</p> <p>Triangle: Mm-hmm.</p> <p>Teacher: Because that might mean that, like, it feels OK. But it’s not like, exactly what you want. Because if it’s not exactly what you want, we want to think about what you do want.</p> <p>Triangle: I pretty much expected that it was gonna turn out like this, so I guess that’s a good thing.</p> <p><b>Reflection:</b></p> <p>Teacher: How did you feel afterward.</p> <p>Triangle: I actually felt pretty confident. Confident.</p> <p>Teacher: Awesome. I like your checkmarks. Adds character. So do you think that your special script and these sentences that we came up with helped you feel less worried? And if so, how did it help? Or not help? I mean, if it didn’t, it didn’t, if it h—</p> <p>Triangle: It helped, I just don’t know how to, like</p> <p>Teacher: You’re trying to figure out your words for it?</p> <p>Triangle: Yeah.</p> <p>Teacher: OK, so, hmm. So it helped to talk through it? What parts felt helpful? I’m trying to figure out a way to help you without putting words in your mouth. You don’t know how to explain it. That’s OK. But it helped?</p> <p>Triangle: Yeah.</p> <p>Teacher: OK, but you’re not sure why at this moment?</p> <p>Triangle: Yeah.</p> <p>Teacher: That’s OK. We’ll kind of try to figure it out a little bit more</p>
3/16 #3	<p>Beginning: A little worried</p> <p>End: Confident</p> <p>Prompt: 11</p> <p>Did SI Help: yes</p> <p>“Drawing helps me feel better”</p> <p>Saying what you are going to do first improves work</p> 	<p><b>Repetitive motion strategy and SI:</b></p> <p>Triangle: Good. It’s I know that’s not really doing anything, [adding an extra layer of color in same spot, coloring in sections of white paper with white crayon] but like I’m just doing this until I can think of like what to draw. So and that – I feel like just drawing randomly is help[ing] me think so I am going to keep trying that.</p> <p>Teacher: OK. So.</p> <p>Triangle: So I’m just going to keep—</p> <p>Teacher: So you – adding this extra layer of colors is one of your problem-solving things that you’re doing right now.</p> <p>Triangle: Yeah. I only did this part at all because I know it’s not going to do anything nothing will be ruined. Can I go – this is helping me think... I think I have an idea.</p> <p><b>Trying to figure out why SI was helpful:</b></p> <p>Teacher: OK. So do you think that your scripts helped you feel less worried today?</p> <p>Triangle: Yeah.</p> <p>Teacher: And if so, how did it help you?</p> <p>Triangle: I don’t know.</p> <p>Teacher: You don’t know? OK. But you do think it helped?</p> <p>Triangle: Yeah.</p> <p>Teacher: OK. I want you to try to think about why. Why do you think it would be helpful? I don’t want to – I don’t want to make up answers for you. Do you want me to write again?</p>

		<p>Triangle: Yeah.</p> <p>Teacher: OK. You said yes. [SI was helpful] And why?</p> <p>Triangle: Why? Because the drawing helps me get better.</p> <p>Teacher: OK. So just practicing helps you? [Triangle nods] What about the practice of talking about what you're doing?</p> <p>Triangle: That also helps.</p> <p>Teacher: How does it help?</p> <p>Triangle: Because like saying what I'm going to draw makes – kind of makes me draw better. Helps make the drawing better because I'm saying what I'm doing.</p> <p>Teacher: Oh, OK. So saying what you're going to do helps you feel like you can do what you're doing, what you want to do easier?</p> <p>Triangle: Yeah.</p>
3/30 #4	<p>Beginning: Confident</p> <p>End: Confident</p> <p>Prompt: 2</p> <p>Did SI Help: yes</p> 	<p><b>Covertly using SI:</b></p> <p>Triangle: I made a bigger circle. And then I want to try this one. Making like two little dots right there and two little dots right here. And then I want to connect them. I'm going to draw kind of like around that like through there. I just feel like it's kind of looking good. And then I want to use this color to I don't know what I'm doing, but it does not look bad at all. [Long pause about 3 mins]</p> <p>Teacher: You're still talking yourself through your decisions as you go?</p> <p>Triangle: I'm still talking in my head.</p> <p>Triangle changes self talk of the reflection smiles:</p> <p>Teacher: I liked how you changed all the smiley faces so they said something different.</p> <p>Triangle: Yeah. I crossed off one right here and then good confident.</p> <p>Teacher: You just wanted them to all be happy.</p> <p>Triangle: Yeah.</p> <p><b>Not bad at all phrasing example:</b></p> <p>Triangle: Yeah. I honestly can't say that looks bad at all. I can say that it's going through the paper, but it's not bad.</p> <p><b>Reflection helped him talk though ideas:</b></p> <p>Teacher: So do you think that using your script helped and why or why not?</p> <p>Triangle: Every time I just don't remember. I just don't know it helped.</p> <p>Teacher: You just think it did.</p> <p>Triangle: Yeah.</p> <p>Teacher: OK. Well let's try to think about – so what are you doing in the process? Let's talk about it a little bit. So when you're using your special scripts, you're basically doing what?</p> <p>Triangle: Um ...</p> <p>Teacher: You're basically ...</p> <p>Triangle: Helping myself.</p> <p>Teacher: OK. You're helping yourself by ...</p> <p>Triangle: Using the scripts.</p> <p>Teacher: OK, what's your script saying most of the time? At the beginning, it's saying like it's giving you some encouragement, right?</p> <p>Triangle: Mm-hmm.</p> <p>Teacher: But while you're doing it, you're still using your script, too, because you're doing what? You're describing, right?</p>

		<p>Triangle: Yeah.</p> <p>Teacher: So why do you think describing what you're going to do next has been helpful?</p> <p>Triangle: Maybe because I know what I'm doing and how I'm going to do it next.</p> <p>Teacher: OK, so it helps you plan.</p> <p>Triangle: Yeah.</p> <p>Teacher: OK. So we can add that detail to that sentence.</p>
4/6 #5	<p>Beginning: a little worried</p> <p>End: Confident</p> <p>Prompt: 14</p> <p>Did SI Help: yes</p> <p>Not sure why</p> 	<p><b>Independent use of error script:</b></p> <p>Triangle: I think I used it. I'm mad I got some green in there, but that's ok. I will add more so it looks like I meant too. I like the green, though. [redacted]</p> <p><b>Reflection:</b></p> <p>Triangle: It really feels good.</p> <p>Teacher: So you feel good? You're feeling good and you're feeling confident.</p> <p>Triangle: Yeah.</p> <p>Teacher: Ok. Do you think your special scripts helped you and if so how so?</p> <p>Triangle: Say it for every time.</p> <p>Teacher: Well, sometimes we talk about that a little bit more. So I know that you're not really sure how it helps, it just seems like it does.</p> <p>Triangle: Seems like it. Yeah.</p> <p>Teacher: Ok. Well, we'll try to figure out, especially in our last interview, we'll try to explore that a little bit more.</p>
4/20 #6	<p>Beginning: A little worried</p> <p>End: Confident</p> <p>Prompt: 4</p> <p>Did SI Help: yes</p> 	<p><b>Reflection before:</b></p> <p>Triangle: I'm only feeling this because like I haven't done art in a while – like since [before] spring break -</p> <p>Teacher: So you're feeling a little - maybe a little bit worried.</p> <p>Triangle: Uh-huh.</p> <p>Teacher: Ok. But we know that even if you're feeling a bit a little bit worried you can talk yourself through it, so that's ok. You've been doing a great job with that, too.</p> <p>Triangle: Yeah. Get it done with the talking.</p>
4/27 #7	<p>Beginning: a little worried</p> <p>End: Confident</p> <p>Prompt: 4</p> <p>Did SI Help: yes</p> <p>“ they kind of helped, I don't know how.”</p> 	<p><b>A positive statement about ability when looking back at old artwork:</b></p> <p>Triangle: Wow, whoever did that's a good drawer. I wonder who did that. [talking about his own previous work, with a smile]</p> <p>Teacher: I know. They are a really good artist, aren't they?</p> <p>Triangle: Yeah.</p> <p>Teacher: I agree.</p> <p><b>New statement:</b></p> <p>Triangle: Work hard and don't stop.</p>



<p>5/4 #8</p>	<p>Beginning: a little worried End: Confident Prompt: free choice sport logo 76ers Did SI Help: yes</p> <p>“When I used them it helped me get better at drawing.”</p> <p>Focus and allowed planning and thinking through the process</p> <p>*Verbal remarked that this was the best drawing he thought he has made of this logo in a long time</p> <div>  </div>	<p><b>Important interaction:</b></p> <p>Triangle: Not the best circle but it'll work. So then I'm going to start off by drawing these lines right here, like the outside lines to be it look like a basketball. And then, yeah. So I did that. Now I'm going to draw the rest of them. So I'm going to draw this line right here. Then right here, I guess. No, I have to do it under it. Dang it. I already messed up... I'm going to see if I'm able to make this into an S so it could be like right there. And then I'll draw the line again.</p> <p>Teacher : Oh, OK. That's a good idea.</p> <p>Triangle: Thank you.</p> <p>Triangle: I feel like I'm already messing up. But I'm just going to go through this and that part. Wait, no I'm not. I have one more line. Is it OK if I do mess up that I can get a new piece of paper or am I not able to?</p> <p>Teacher : That could be one of your solutions.</p> <p>Triangle: OK. All right, the rest is blue so this is going to be really tricky. Uh-huh. I'm trying to find the dark blue that I just used.</p> <p>Teacher : I believe you used this one.</p> <p>Triangle: Oh yeah, I did.</p> <p>Teacher : So how are you feeling?</p> <p>Triangle: OK. If I'm being really honest, I'm doing this right now because I know this isn't what – I know bad can't be a word its not good to say I'm bad. But I don't really like it.</p> <p>Teacher : And that's OK. You don't have to like your artwork all the time.</p> <p>Triangle: Yeah, I don't like it.</p> <p>Teacher : But I noticed that you were persevering through it anyway. You didn't give up on it and you didn't avoid trying continuing to try.</p> <p>Triangle: I didn't give up but I think I want to stop this one is it OK if I restart.</p> <p>Teacher : Yeah. Because you know what? You finished that work and you can totally do another version now that you've checked it out. That sort of ends up being your pre-drawing, right?</p> <p>Triangle: Mm-hmm.</p> <p>Teacher : You figured it out. You didn't get upset with it. You didn't avoid your work and that's wonderful. You used your self-statements. Those are all things that I noticed. You kept persevering, or working through it, that was wonderful.</p> <p>Triangle: Thank you.</p> <p>Teacher : So I hope that you feel proud of yourself because that's good.</p> <p>Triangle: I do.</p> <p>Teacher : Because you did everything you needed to do to try and make it work and you didn't actually give up.</p>
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**Student self-reflection ratings during Individual sessions**

Before and After using the SI technique.



Great: Very Confident Good: little worry Ok: worried Upset: Very Worried Badly: Unconfident

\*\*\* When a student has picked more than one rating the lower, or more colored in response is recorded

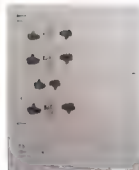
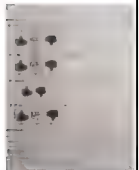
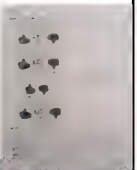

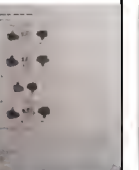
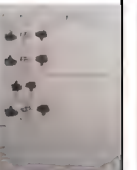
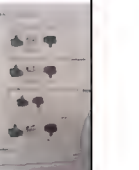
**Triangle**

Session #	Before starting	After Self-Instruction
1		
2		
3		
4		
5		
6		
7		
8		

**In-Class Observations Data Matrix**

\* Highlighted answers indicate that strategy or behavior was observed

Date	3/3/22	3/11/22	3/21/22	3/29/22	4/6/22	4/21/22 end	5/9
<b>Class theme/ objective</b>	Self-portrait on ceramic tile (tradition for 5th grade)	Introduction to Paper cutting techniques from around the world. Began exploring and practicing paper cutting techniques	Continued paper cutting traditions project. Focus on showing emphasis and using contrast	Paused on paper cutting traditions project  Time given to finish previous projects and pick a work to display in the art show	Finished paper cutting traditions project.  Self reflection and assessment	Began learning about how to use and care for watercolor paint, use of household additives to make watercolor effects	x
<b>Materials</b>	Pencil and Glaze on ceramic tile	Color paper, glue scissors	Colored paper, glue, scissors	Various  Colored pencil	Color paper, pencil, paper, markers	Watercolor Kosher salt table salts, Hydrogen Peroxide	x
<b>Mal-adaptive behaviors observed</b>	Yes ✓	No	No	No	No	No	x
<b>Type of behavior</b>	Negative self talk ✓  Other: wanted to start over, requested this a few times.	N/A	N/A	N/A	N/A	N/A	x
<b>Keywords in Negative self-talk if over heard</b>	Really bad  Start over Messy Ruined my work	n/a	n/a	n/a	n/a	n/a	x

<b>Coping technique attempted</b>	Yes ✓	Yes ✓	Yes ✓	Yes ✓	Yes ✓	Yes ✓	Yes
<b>Technique attempted</b>	Self instruction Break	Self instruction	Self instruction	Self instruction	Self instruction	Self instruction	SI
<b>Accommodation made/ needed</b>	Visual schedule	Visual schedule	Visual schedule	Visual schedule	Visual schedule	Visual schedule	Visual schedule
<b>Teacher perceptions on student independence</b>	Teacher helped Triangle to use SI to think through his issues when glazing.  Forced independence by not giving him a solution - student able to find and independent solution	Triangle asked clarified questions during my presentation, but worked independently otherwise. Did not need me to discuss the objective today. Was very independent, no negative self-talk overhead.	Asked a few questions today looking for clarification.  Technique required fine motor skills. I expected negative self-talk and avoidance behaviors could be possible, but neither where displayed, Demonstrated perseverance.	Triangle worked on adding strength to an artwork. No procrastination or avoidance behaviors noted.  Use the entire class period	Started working right away, seems more open to experimenting .  Did not need teacher assistance to help him begin.	No reminders needed.  Stayed calm and ready even when techniques did not always work, or will not be noticeable until later - remained patient.	x
<b>Other notes</b>	Triangle showed pride after figuring out a way to control the material	Experimented more readily with materials	Consistent working - material struggles, did not give up on his own cutting.	Left with a very positive mind set			x
<b>Student Reflecti on notes</b>	* Teacher transcribed as student cleaned up materials " ... helped when I remembered to use them."	* reported that SI was helpful	* Reported Using SI unsure how helpful it was	* Reported Using SI unsure how helpful it was	* Reported not being worried today, but used SI, didn't know why it helped	* Reported not being worried today, but used SI, didn't know why it helped	*requested to fill out exit ticket  Reported SI was used and helped. No teacher data
<b>Student Exit ticket</b>							



**Student Reflection: In-Class self-report**

\* Blank = no answer N/A if SI not used

Questions asked:

1. I made an artwork today:
2. I felt worried or unsure today when I was making art.
3. I thought about, said, or read the sentences I made to help me if things got hard?
4. If you used your sentences, did they help?

**Triangle**

Date	#1	#2	#3	#4
3/3/22				
3/11/22				
3/21/22				
3/29/22				
4/6/22				
4/21/22				
5/9/22				

## Interview I

### Interview 1 Questions

1. For the purpose of this study I need to give you an amazing code name to keep your secret identity, do you have a secret code name in mind? If not, do you mind if I pick one for you?
2. I wanted to ask you to tell me a few things that you love to do. Did you have to work hard to learn any of these things?
  - a. Was there ever a time that \_\_\_\_\_ was really hard for you?
  - b. What did you do?
3. What do you think about making, or looking at art?
4. Do you ever make art outside of school, if so, what kind?
5. Do you think art is something everyone can do? Why or why not?
6. I want to talk to you about our art class, how do you feel about the work you do in art class? Why do you feel that way? We can look at your most recent artwork if you want to.
7. Do you ever feel worried in art class about your abilities?
8. Would you call yourself an artist? Why or why not?
9. What do you do when you get too worried or stressed?
10. Are there any art activities you really do not like? If so, which materials frustrate you? What about them frustrates you?
11. Do you think the way you feel about art or making things can change?

### Triangle Interview I

Question #	Keywords or phrases	Quotes
1	Triangle	
2	Video games Sports- basketball and soccer Art	
2a	Video games - never hard to figure out Sports - needed to practice Art - comparative speech	Triangle: And when I'm good at it I like art. Teacher: What about with art? Triangle: Well, I don't know. I don't think I'm like the best artist in the class, obviously.
2b	Soccer - first time quit, tried again later  Reference "best" and "good", "worst" to measure performance  Comparative speech	Teacher: OK. What would make you the best? Triangle: Practice. Teacher: OK. And that's what – so did you – when you felt like you were the best, were you one who was practicing more, you think than other people? Triangle: Yeah. And also, I'm on a basketball team right now. We're pretty good. I'm like the third best."

3	Making: fun Looking: describing comparative tendencies- measure his own art against others - good or bad	Triangle: Well, when it's not my art it's usually good. I mean I think my art's not terrible. But still, it's not always the best.
4	Sometimes Mostly self-portraits and sport themes	
5	Yes - practice = success	"If you practice doing art a lot, then you can be good."
6	Not - top tier Not amazing It's not terrible -but not good either	"I don't think it's top tier."  "I don't think it's terrible, though."  "I didn't feel amazing, but I felt I guess I felt fine."
7	Mentioning wishing to be closer to teacher ( already sitting right next to teachers space) Sometimes worried	"No. Not sometimes, but not really. "
8	No - not an artist Maybe someday Reminded him - we are all still working on our art skills and development	"I'll probably get there some day, though. Like if I really practice." "I mean, I think I'm kind of good at art. Like this picture looked really bad, but then I actually it came like better."
9	Talk to parents Wait it out Avoid problem  Sad feeling - came back	Triangle: Or I just do nothing about it and wait for that to go away. Teacher: OK. So sometimes you just wait. Triangle: Yeah. Teacher: You just wait it out. OK. Do you do that sometimes in school? Triangle: Sometimes. Like almost every single day, I get this random feeling that I feel like really sad. Like I don't feel sad, but I get this random feeling. Like it's not good. What I do is not [good]. So I stop [trying].
10	No materials disliked Feeling - bad art	You know, like sometimes I might feel like I have bad art. It sometimes frustrates me.  Like when [redacted- name of former art teacher] was there, I didn't think my art was good"
11	"Yeah, probably"	
		<b>Words in interview associated with self doubt:</b>  Not the best, Worst, Bad, Terrible, Bad job

## Interview II

1. The last time I asked you to tell me about your ideas, you told me you thought art ( is or is not) something everyone can do. Do you still think that is true? Why or why not?
2. How are your feelings about art right now? Do you think you can make art? Why or why not? We can look at your most recent artwork if you want to.
3. We have been working together to create helpful self-statements or helpful sentences by writing, reading, and thinking about what we are doing, and what we can tell ourselves when making art gets hard or we start to worry. I want to ask you a little more about that if that is ok?
  - a. We have been trying to look and listen carefully to the words we use when we are working to make sure the words we use to talk to ourselves are kind and helpful. Do you think it is important to think about the words we think and say about ourselves?
  - b. How did you feel about writing your own self-statements or ‘helpful sentences’? Was this really hard for you to do? Did it get easier to do with practice?
  - c. Do you think repeating these sentences out loud or in your head when you make art is helpful? Why?
    - i. If a student mentions or infers the use of an error script: I think you are talking about making an error script. When we dislike how things are going or make a mistake and talk about it and how it could change, we are using our sentences to correct an error. Did you find error scripts helpful?
  - d. You reported trying/ not really using this technique in regular art class, how did you feel about using your self-scripts in class?
  - e. Have you tried, or will you try, this technique when you make artwork at home or for any other reason?
4. Was there an art activity prompt that we have done that you really liked and made you feel good or confident in your abilities? Why do you think it made you feel that way?
5. Are there any art activities we did during one of our weekly sessions you did not like? If so, what made you dislike it?
6. Do you think any of the things we have been practicing, like making small artworks, practicing self-statements, and trying to change our words, have been helpful?
  - a. Have you noticed any changes in your feelings or ability to get started?
7. Do you think you can or will still use this technique now that the study is over?

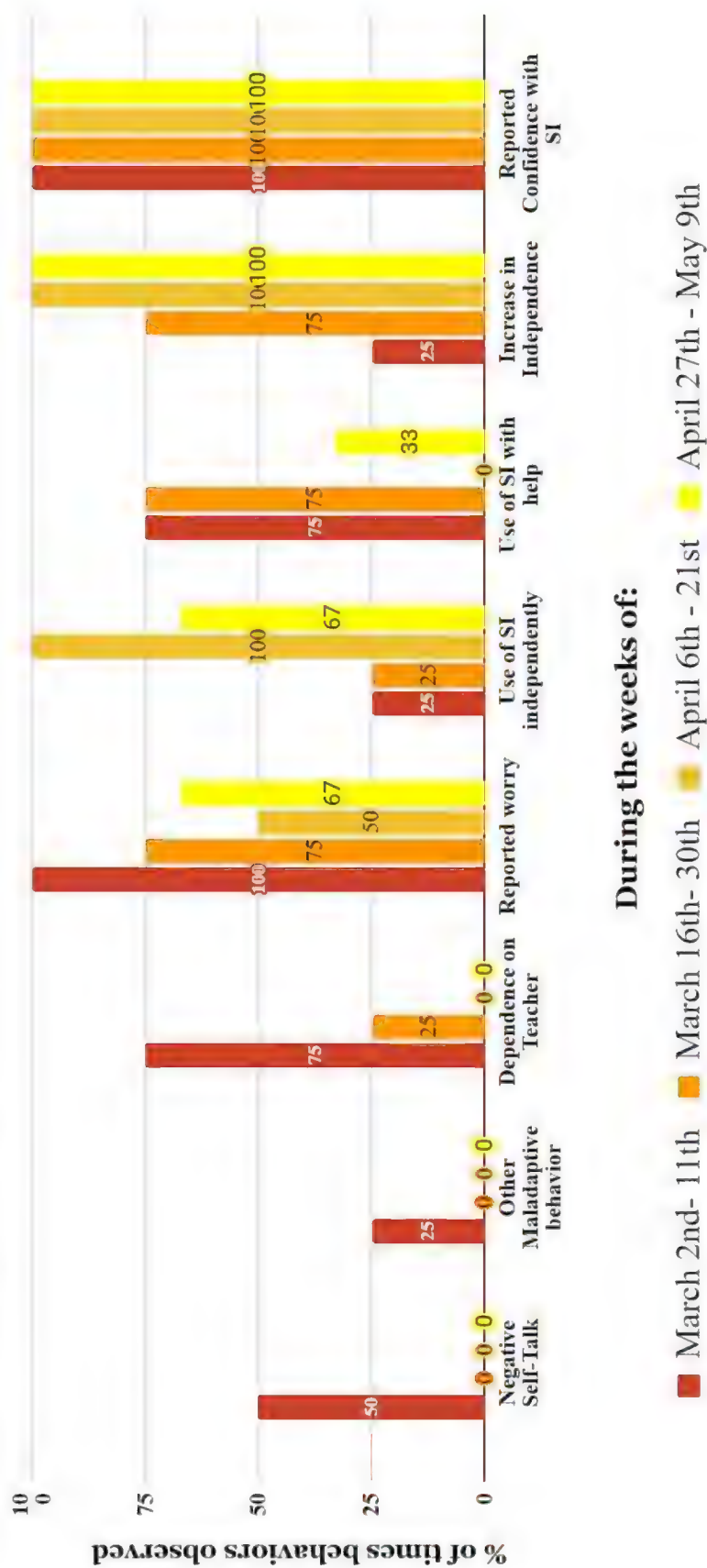
## Triangle Interview II

Question #	Key words and phrases	Quotes
1	Yes, anyone can Want to practice	Is art still for everyone?  Triangle: I think that’s true because if people practice more they can get better at it.

2	Good Better I feel confident than I did Try more	<p><b>How are your feelings about art right now?</b></p> <p>Triangle: Really good about it. Like I went from not very good to good.  Teacher: That's great. Why do you think that's true?  Triangle: Because these classes have really helped me. When I've done them I've improved at art.  Teacher: So this process has been helpful for you and helped you feel a little more confident?  Triangle: Uh-huh.</p> <p>"I never thought I could do this before... I wouldn't have even tried to" (referencing a drawing he was making during the interview of the Lakers logo)</p>
3 a	Yes Tell yourself Feeling Good and bad Practice	<p><b>Is it important to think about the words you use?</b></p> <p>"Yeah, it's hard to explain... what you tell yourself makes you feel good or bad. I can practice and try things I can do [a] bad job, that doesn't mean I'm bad."</p> <p>Triangle: If it's a good way then yes, but if it's a bad way then definitely not.</p>
3b	Really good It was weird at first Easier later Kept trying	<p><b>What were writing self-statements like?</b></p> <p>Triangle: It was hard to do at first, but then it got easier.</p> <p>"Really good, I think they are good."</p>
3c	Yes Helped Felt better Knew what I was going to do Planning	<p><b>Do you think repeating them out loud and in your head was helpful?</b></p> <p>Triangle: Yes, and I think so because they can help you improve your art. You already kind of have a plan. It helps me to like, plan.</p> <p>"Good because they make me more confident and do my work better."</p>
3d	Worried Helped me plan didn't just stop Always used them in class Helped me focus	<p><b>How was using it in class?</b></p> <p>"When I started just thinking like this it was easier to think.</p> <p>Teacher: You have been trying this in regular class, right?  Triangle: Yes. Confirmed. Affirmative.</p>
3e	Yes I will keep using them Start making more art  I enjoy it	<p><b>Have you used SI at home or elsewhere?</b></p> <p>"I didn't use to do art at home, but I want to do more because I know I can now, and I can use my sentences to remind me."</p> <p>Teacher: Do you think you might use it for any other reason?  Triangle: Yes.  Teacher: Do you have any ideas when you might want to use it?  Triangle: I mean, I guess like whenever I'm doing art.  Teacher: Do you think you could use it for other things other than art?  Triangle: Yes. Actually, I think it's just going to be like different than when I do it with the art, different words.</p>
4	The lines Repeated lines Free Extra relaxing	<p><b>Was there an art activity you really liked?</b></p>

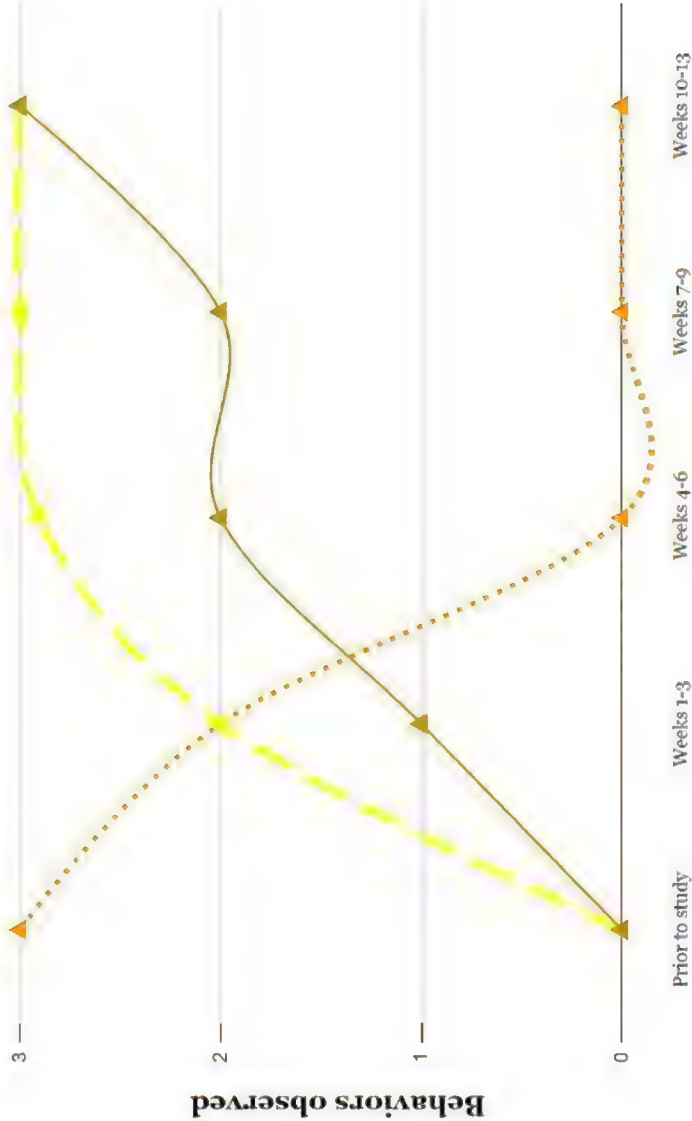
5	Liked most of them Liked that you let me change them a little	<b>One you really didn't like?</b>
6		<p><b>Do you think any of the things we have been practicing, like making small artworks, practicing self-statements, and trying to change our words, have been helpful?</b></p> <p>Triangle: More able.  Teacher: More able to do it?  Triangle: Mm-hmm.  Teacher: So less like you can't do something?  Triangle: Mm-hmm?</p>
6a	<p>Self-statement and thinking about words were very helpful.</p> <p>Made me think I can do well.</p> <p>Made it easier to start out and not wait.</p> <p>Can probably be used in other things too</p>	<b>Have you noticed any changes in your feelings or ability to get started?</b>
7	yes	<p><b>Will you continue to use this now the study is over?</b></p> <p>"I will keep using it to help me."</p>

### Triangle's Observed Trends



Triangle Participation in SI and Observed Changes in Behavior and Independence

0= Not observed 1= Observe some 2= Observed Majority of the time 3= Observed all the time



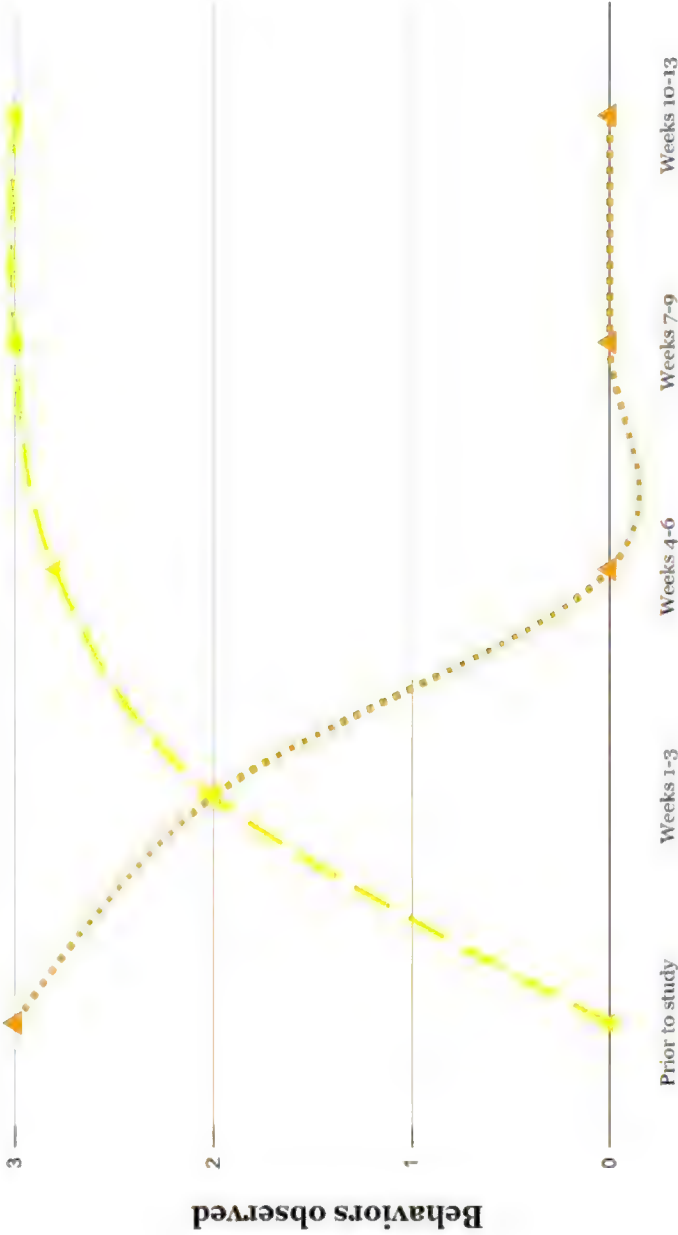
Observations During the Study

- ▲ Triangle use of negative self-talk ▲ Triangle use of SI
- ▲ Triangle Independent problem-solving



Triangle Participation in SI and Observed Changes in Confidence and Negative Self-talk

0= Not observed 1= Observe some 2= Observed Majority of the time 3= Observed all the time

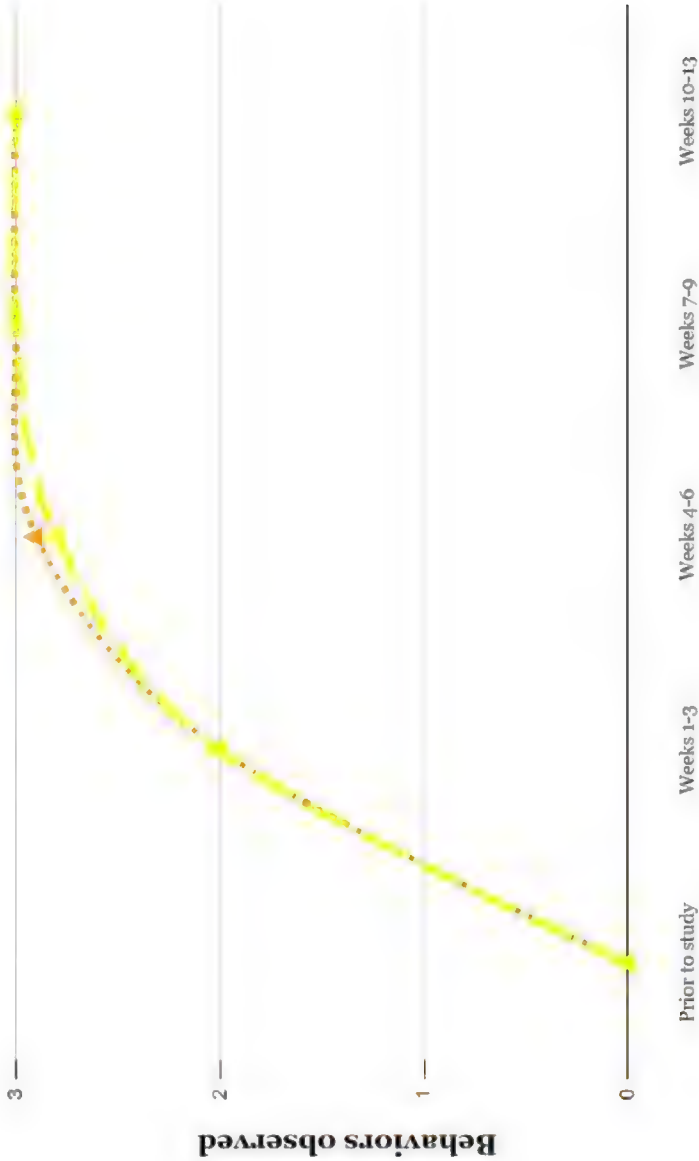


Observations During the Study

▲ Triangle use of negative self-talk ● Triangle Reported Confidence

Triangle Participation in SI and Observed Changes in Confidence


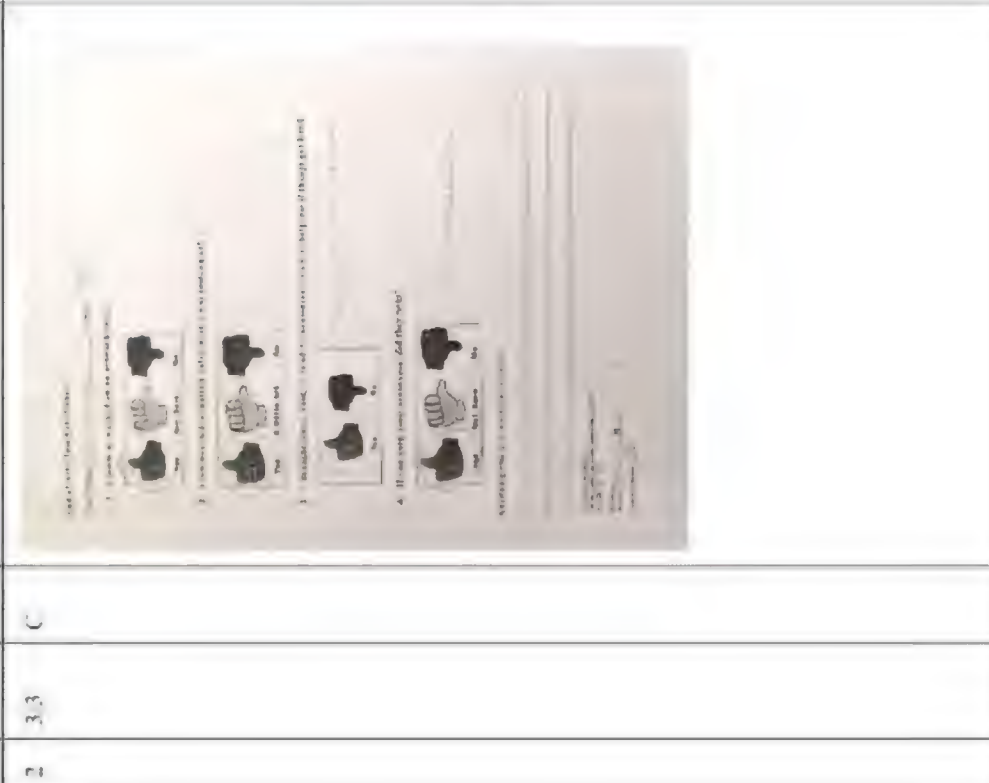
0 = Not observed   1 = Observe some   2 = Observed Majority of the time   3 = Observed all the time





Observations During the Study


▲ Triangle use of SI   ▲ Triangle Reported Confidence

Photo Log, Observational Protocol  
Student name: Triangle

#	Date	Type	Photographs and Notes
1	3/2/22	I	 <p>Session 1 prompt five</p> <p>The photograph shows a worksheet titled "Session 1 prompt five". It features a drawing of a person in a blue box, and a row of five smiley faces. The text on the worksheet includes "I have a paper and a pencil and a ruler" and "I have a paper and a pencil and a ruler".</p>
2	3/3	C	 <p>The photograph shows a worksheet with four sections, each containing a thumbs up/down icon and a question. The questions are: "1. I have a paper and a pencil and a ruler", "2. I have a paper and a pencil and a ruler", "3. I have a paper and a pencil and a ruler", and "4. I have a paper and a pencil and a ruler".</p>

#	Date	Type	Photographs and Notes
4	3/11	C	

#	Date	Type	Photographs and Notes
3	3/9/22	I	

#	Date	Type	Photographs and Notes
5	3/16/22	I	<p>Session 3 prompt 1!</p>  
6	3/21	C	
7	3/29/22	C	





#	Date	Type	Photographs and Notes
10	4.6.22	1	<p>Session 5 prompt 14</p>  <p>Art Activity: Paper Student Self Assessment          Draw a picture of yourself and write down your strengths and weaknesses.</p> <p>1. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p> <p>2. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p> <p>3. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p> <p>4. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p> <p>5. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p>
11	4.20	1	<p>Session 6 prompt 4</p>  <p>Art Activity: Paper Student Self Assessment          Draw a picture of yourself and write down your strengths and weaknesses.</p> <p>1. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p> <p>2. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p> <p>3. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p> <p>4. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p> <p>5. I am a good person. I am a good person. I am a good person. I am a good person. I am a good person.</p>

#	Date	Type	Photographs and Notes
12	4/21	C	
13	4/27/2020	I	



14	4-27	I	Self-statements 
15	5-4	I	Session 9 Student choice drawing (76ers logo) 

Frangle's Photo log. \*Type of session I- Individual Session, C- Class Session

#	Date	Type	Photographs and Notes
16	5.9	C	

#	Date	Type	Photographs and Notes
17	5.9	I	

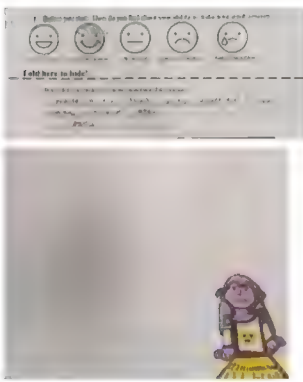

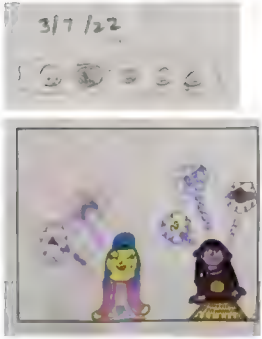
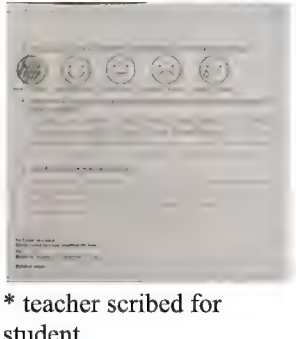
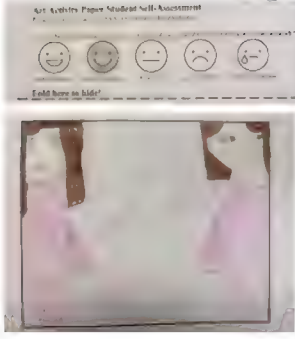
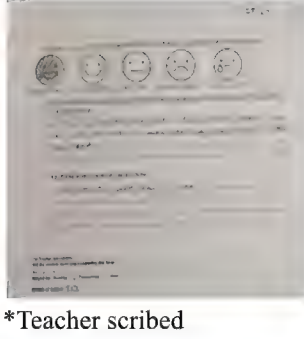
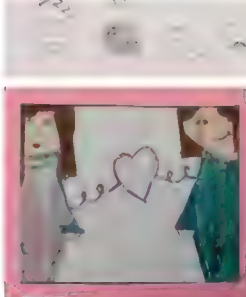



**Pastels Written Self-Statements**


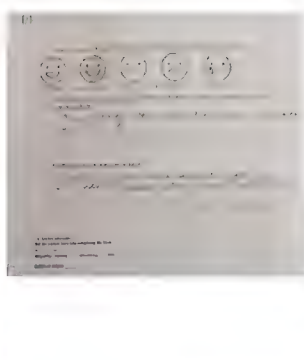


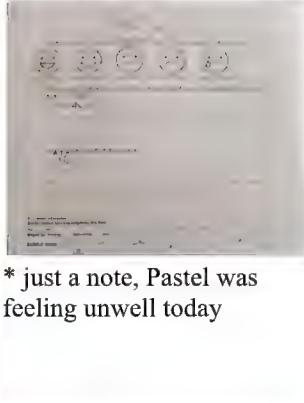
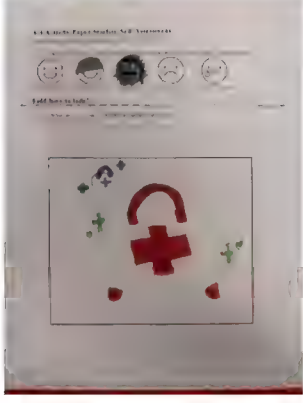
Pastel
I will do great.
I will not give up!!
I am doing great!!
I can do this!!
Amazing!
I will get through this!!!
I believe in myself.
I will find a way to change my mistake.
I feel great.



**Pastel SI Self-Reflection Matrix**










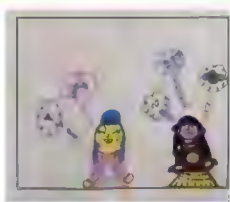


Date	Session #	Key Points and words	Beginning	After Using SI
3/3	1	<p>Beginning: <b>a little worried</b>            End: <b>a little worried</b> ( to finish it next time)</p> <p>Prompt: 11            Used: markers pencil</p> <p>Did SI Help: <b>yes</b>,</p> <p>Felt a little better            Noted that she felt she would have been ok without them too.</p>		
3/7	2	<p>Beginning: <b>A little worried</b>            End: <b>Confident</b></p> <p>Prompt: 11            Used: markers, pen</p> <p>Did SI Help: <b>yes</b></p> <p>Feel confident            "I kept telling myself I could do something"</p>		 <p>* teacher scribed for student</p>
3/28	3	<p>Beginning: <b>a little worried</b>            End: <b>Confident</b></p> <p>Prompt: 10            Used: pencil, color pencil</p> <p>Did SI Help: <b>yes</b>            Less worried            "Reading script in my head"</p>		 <p>*Teacher scribed</p>
3/31	4	<p>Beginning: <b>a little worried</b>            End: <b>Confident</b></p> <p>Prompt: 10            Used: marker, pencil, glitter</p> <p>Did SI Help: <b>Yes</b>            Made me feel better</p>		



4/4	5	<p>Beginning: a little worried</p> <p>End: a little worried ( about future addition)</p> <p>Prompt: 12</p> <p>Used: paper, marker, pen, glue</p> <p>Did SI Help: yes</p> <p>made a mistake</p> <p>said it was ok</p>		
4/18	6	<p>Beginning: a little worried</p> <p>End: a little worried</p> <p>Prompt: 6</p> <p>Used: markers</p> <p>Did SI Help: yes</p> <p>*Did not realize she was using scripts</p>		
4/25	7	<p>Beginning: worried</p> <p>End: Confident</p> <p>Prompt: 6 continued</p> <p>Used: markers, glitter</p> <p>Did SI Help: kinda?</p> <p>'Kinda' of helped</p>		 <p>* just a note, Pastel was feeling unwell today</p>
5/2	8	<p>Beginning: worried</p> <p>End: little worried</p> <p>Prompt: 15</p> <p>Used: marker, pen, pencil</p> <p>Did SI Help: n/a</p> <p>Reported that she didn't really need to use them today</p>		 <p>*note: the student was feeling very unwell today</p>

**Pastel SI Sessions Observational and Transcription Data Matrix**










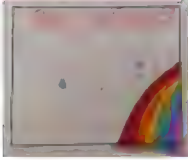


Date	3/3/22	3/7/22	3/28/22	3/31/22
Session	1	2	3	4
Prompt #	11	11 continued	10	10 continued
Materials	Marker and pencil	pencil and marker	Pencil, color pencil	Color pencil, marker, glitter
Maladaptive behaviors observed	Yes	No	Yes	Yes
Type of behavior	Negative self-talk	N/A	Negative self-talk	Negative self-talk
Negative self-talk if used	Terrible bad	n/a	Ugly Wrong	ruined
Non verbal signs of self-doubt	Tensing up	Extended pauses in work/ dialog	Pause Making exaggerated facial expressions	frown
SI technique used with teacher help or independently	Help	Help	Help	Help
Observed or reported results while using SI	<p>Student did not completely seem to understand why I was making her say things I already noticed but did repeat her actions to herself when I requested it.</p> <p>She felt it was a little silly</p>	Student needed reminders on how to talk through errors	Students stopped assessing used SI techniques with some prompting and continued on in drawing.	<p>Using SI as a way to problem solve kept Pastel continuously working, did not ask for new papers or stop working at any point</p> <p>Managed to calm herself when errors were created.</p> <p>Starting to independently use technique, without reminders</p>
Other coping techniques attempted	n/a	n/a	n/a	n/a

<b>Other Observations</b>	Student continued to work on the same piece and did not ask to restart even after making errors, she was able to find solutions to solve her problems.	Student utilized SI in a whisper and aloud - seemed a little embarrassed by talking aloud.	After the review demo, and a few reminders Pastel started to show some independence in using SI today	Talking aloud is still reported as a little embarrassing and 'weird'  Note: Simple phrases like "so what comes next" or "what needs to happen now" seem to be effective in helping student move on to the next idea or continue thinking without adding or inserting your own influence on other persons imagery.
<b>Self-reflection Before starting</b>	 Good: little worried	 Good: little worried	 Good: little worried	 Good: little worried
<b>Self-reflection after using SI</b>	 Good: little worried	 Great: Confident	 Great: Confident	 Great: Confident
<b>Work at the end of Session</b>				
<b>Keywords used in session or reflection</b>	Only just started,  I could do it without this.  It is new	I am...  I will...	I can do this	Worry  Ok




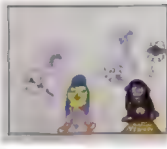

**Pastel Continued**


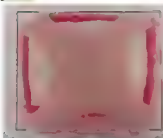

Date	4/4/22	4/18/22	4/25/22	5/3/22
Session	5	6	7	8 End
Prompt #	12	6	6 continued	15
Materials	Markers, glitter, paper, glue	markers	Markers	Color pencils, marker
Maladaptive behaviors observed	No	Yes	Yes	No
Type of behavior	N/A	Other: made a joke that was not kind to herself - it was sarcastic and she laughed while saying it so I am not counting it as negative self-talk in the same way.	Negative self-talk	N/A
Negative self-talk if used	n/a	Sarcastically said, "I am terrible."	I can't	n/a
Nonverbal signs of self-doubt	Facial expressions	Facial expressions		
SI technique used with teacher help or independently	Help - Only reminders to speak out loud - starting to internally use statements	Independent	Independent	Independent
Observed or reported results while using SI	<p>Pastel did not have a clear plan in her artwork today. Would usually be a stressor, but she experimented with materials and seemed ok with playing around and continuously changing her ideas. Remained calm all session.</p> <p>Reported that SI was reassured her of choices Said she was a little worried at the end. - nervous about finishing it in the future</p>	<p>Pastel mostly used SI in whispers, or silently, pausing and then changing choices, did not realize they were using this structure to talk through choices</p> <p>Remained calm during moments of doubt.</p>	<p>Mostly independently using SI - almost exclusively in a whisper or covertly</p> <p>Making changes after pauses</p> <p>Remained calm.</p>	<p>Used the SI technique independently for long stretches of time</p> <p>Did not exhibit any signs of worry related to her artwork</p> <p>Did not realize or remember talking through her work during our session - was surprised when I told her my observation.</p>

Other coping techniques attempted	n/a	n/a	n/a	n/a
Other Observations	Very distracted today, but still worked and used SI to work throughout the session, talking was not an avoidance behavior	Pastel was tired today. Very talkative, had a hard time starting because she was very excited about the song she chose for inspiration.	Pastel reported that she felt unwell today.  Was worried about other factors beyond her artwork.	Pastel felt very unwell today. It was very clear, and she had been in some pain which was worrisome, but she said she was taking care of the problem, but it did make it harder to work and focus.
Self-reflection Before starting	 Good: little worried	 Good: little worried	 Ok: worried	 Ok: worried
Self-reflection after using SI	 Good: little worried	 Good: little worried	 Great: Confident	 Good: little worried
Work at the end of the session				
Keywords used in session or reflections	Telling			Healer

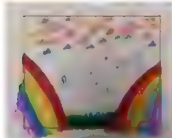
**Pastel SI Sessions Quotes/ Examples**


<b>Date</b>	<b>Overview of Self-assessment</b>	<b>Quotes and Examples of students experiences with SI technique</b>
3/3 #1	Beginning: a little worried End: a little worried Prompt: 11 Did SI Help: yes, 	<p><b>First error script created with help:</b></p> <p>Teacher: You just made an error statement. "I don't like that this is here."            How can you fix it?            Pastel: Make it like this.            Teacher: So change the kind of line. So you want to say that out loud to yourself.            Pastel: I want to change this and make some sleeves for her. Making some fingers.            Teacher: Ok.            Pastel: Oh, no.            Teacher: Oh, no, what?            Pastel: These are bad fingers.            Teacher: Are they bad fingers -            Pastel: Yes.            Teacher:- or are they just fingers you don't like?            Pastel: I don't like them.            Teacher: There's nothing bad about them? You say I don't like how this looks. I need to change it.            Pastel: I don't like it.            Teacher: How can you change it? Say you're changing it into a -            Pastel: Good. This stirring thing.            Teacher: You turned it into a circle, right? It's more of a shape. Did that make you feel better about it?            Pastel: Yes.            Teacher: Ok. It's weird, but we're going to talk to ourselves out loud as much as possible.            Pastel:I see what you're doing,</p> <p><b>Reflecting:</b>            Pastel: Yeah. Not really because I've not done it before; but not really because I still felt like I know I could mess up a little bit, but if I say something I know it will make me a tiny bit better but I could still be worried but at least I know how to fix it.</p> <p>So it made me feel a bit better because I was talking to myself and I was, "I can do this. I'm confident," when I felt like I was making a mistake. So it made me feel quite confident and made me feel like quite happy that I felt great like to myself. I was like, yes, I could do it, which helped a little bit, but normally I would still be ok even if I did make that mistake because I would know how to fix it. And then in my mind instead of talking to myself, I would be, like, you're doing amazing. This is great. So yeah. And that's good.</p>
3/7 #2	Beginning: A little worried End: Confident Prompt:11 Did SI Help: yes	<p><b>Reflection:</b>            Pastel: I think it made me feel more confident because I was like, I can do this. I feel really proud of myself for saying that to myself."</p> <p><b>Explaining a choice she made in her artwork.:</b></p>

		<p>Pastel: I realized this wasn't such a good idea, but it's ok because I will just use a different color to go over it. [Pause as student works]</p> <p>Pastel: Ta-da. Ta-da.</p> <p>Teacher: So what's next?</p> <p>Pastel: And now the hard part.</p> <p>Teacher: What is the hard part?</p> <p>Pastel: Making her a friend. That's the easy part, though. This time I'm starting off with a different pace."</p>
3/28 #3	<p>Beginning: a little worried</p> <p>End: Confident</p> <p>Prompt: 10</p> <p>Did SI Help: yes</p> 	<p><b>Beginning reflection while picking a rating on the ability scale:</b></p> <p>Pastel: I'm always going to feel a little worried in my work because sometimes I think that I'm starting off right, but I know I could mess up. But I know that I can make that mistake. I can fix it. But I'm still a little worried because there could be some times when I couldn't."</p> <p><b>Error script example with assistance:</b></p> <p>Teacher: What's the matter?</p> <p>Pastel: That's ugly.</p> <p>Teacher: OK, so why? What do you not like? Say, I don't like the....?</p> <p>Pastel: The head shapes.</p> <p>Teacher: The head shapes. I can – what can you do to change it?</p> <p>Pastel: Erase the whole thing? No.</p> <p>Teacher: You don't need to erase the whole thing. What can you do?</p> <p>Pastel: I can try to fix it.</p> <p>Teacher: How? You want to be specific. What part is the part that you don't like? You can say, I don't like this line or I don't like this part. And change that one little part at a time.</p> <p>Pastel: So my mom likes turtlenecks. I don't like turtlenecks. I'm just going to make her a turtleneck. So I fixed my problem.</p> <p>Teacher: There you go. That was problem-solving. And you didn't start over. Didn't feel like you needed to start over. I think that's wonderful. Oh, you've got such cute faces.</p> <p>Pastel: Yeah. That looks adorable. My mom says I always look adorable. It's unfinished. This is not as bad as I thought. My mom likes turtlenecks.</p> <p><b>End reflection:</b></p> <p>Pastel: [ reading reflection questions] How do you feel after practicing this? Can you write it?</p> <p>Teacher: Sure. Tell me what you want me to write.</p> <p>Pastel: Yes, it helped me feel less worried because I was saying it in my head and it made me feel more confident. It made me find the idea right away what I wanted to fix and how I wanted to fix it.</p>
3/31 #4	<p>Beginning: a little worried</p> <p>End: Confident</p> <p>Prompt: 10</p> <p>Did SI Help: Yes</p>	<p><b>Error script:</b></p> <p>Teacher: Usually these are really sparkly when you touch it.</p> <p>Pastel: Why you not sparkly? [talking to a glitter marker] You ruined my picture.</p> <p>Teacher: Why do you think it's ruined?</p> <p>Pastel: Because it's all red and now I have to cover it.</p> <p>Teacher: So what can you do?</p>

		<p>Pastel: Cover it. Now it looks like she's bleeding. Look at her hand. Stop bleeding.</p> <p>Teacher: [watched Pastel change to a silver color and blend] So you found a solution, didn't you?</p> <p>Pastel: Cover it with more sparkly. The best solution.</p> <p><b>End Reflection:</b></p> <p>Pastel: Yes, it helped me feel less worried because I was saying it in my head and it made me feel more confident. It made me find the idea right away what I wanted to fix and how I wanted to fix it.</p> <p>Teacher: OK. So. It helped me feel less ...?</p> <p>Pastel: Less worried about my artwork and if it would turn bad because I felt like I believed in myself while reading my script lines in my head</p>
4/4 #5	<p>Beginning: a little worried</p> <p>End: a little worried</p> <p>Prompt: 12</p> <p>Did SI Help: yes</p> 	<p><b>Reflecting:</b></p> <p>Pastel: All right. But anyways, I feel like my script helped me because when I felt like I made a mistake I said I can do this. And it made myself more confident to completing or to get as far as I got today, which is March 4th.</p> <p><b>Reflecting:</b></p> <p>Teacher: So you are using you're your self-statements. I noticed that most of them you use in your head, which is great, because that means it's getting easier to do in some ways, right?</p> <p>Pastel: Yeah.</p> <p>Teacher: So do you think they were helpful for today?</p> <p>Pastel: Yes.</p> <p>Teacher: Ok. So did it change your happy face answer or are you keeping it where it was?</p> <p>Pastel: Just keeping it where it was because I don't know what this will turn out to be. [I am worried about the future of this artwork.]</p>
4/18 #6	<p>Beginning: a little worried</p> <p>End: a little worried</p> <p>Prompt: 6</p> <p>Did SI Help: yes</p> 	<p><b>Joke:</b></p> <p>Pastel: [tone, joking, partly laughing] Let me just secretly say I'm doing terrible I am the most terrible.</p> <p>Teacher: You feel that way?</p> <p>Pastel: Oh no, I'm actually not telling the truth -</p> <p>Teacher: Ok?</p> <p>Pastel: - when I say that, I was kidding.</p> <p>Teacher: I know, but you still have to remember your words have power. You have to be careful with them sometimes.</p> <p>Pastel: I know.</p> <p>Teacher: Not everybody knows when you're kidding.</p> <p>Pastel: You do.</p> <p>Teacher: But I'm not everybody.</p> <p>Pastel: That is true.</p> <p>Teacher: And we know just from doing this that our words have a lot of power, right?</p> <p>Pastel: Yes.</p> <p>Teacher: Even just what you tell yourself as a joke, be careful ok?</p>



		<p><b>Reflection on the use of SI:</b> So how do you feel after we've practiced our technique?</p> <p>Pastel: We didn't, though. Teacher: You did, though. Pastel: I just made it today. [Reading question again to herself] Do you think your special script helped you feel this way? No. Teacher: You don't think you used it today? Pastel: Yes. Teacher: What about when you were drawing with the red? Did you notice what you did after you made a line that you didn't like? Pastel: Yeah. Teacher: What did you do? Pastel: I said I know how to fix it. Teacher: You did and you talked about it. So did you use your scripts? Pastel: Yeah. Teacher: Did you realize you were doing it at the time? Pastel: No, I didn't realize until just now when you told me, I forgot it was normal. Teacher: No. That's a good thing. That's what I was hoping was going to happen that eventually, it would just become normal. Pastel: Anything else you want me to know? Nope. Thanks. "Pink fluffy unicorns dancing on rainbows." [Starts to sing]</p>
4/25 #7	<p>Beginning: worried End: confident Prompt: 6 continued Did SI Help: kinda?</p> 	<p><b>The end reflection:</b></p> <p>Teacher: I really do hope you feel better. I'm not used to seeing you look so sad. Pastel: Hm. Teacher: There were parts of it that frustrated you today. Pastel: Kinda, kinda. Teacher: So you think they kind of helped today when you were feeling worried? Not as much as normal? Is that true? I'm wondering if it'll help next time a little bit more when you're hopefully feeling better. I'm really sad that you weren't feeling good today. Pastel: Hm. Teacher: I really hope you feel better. Pastel: Thank you. Can you cut it out [so I can take it home]? Teacher: Yeah. We're going to get our stuff and get ready to go because it's about time. Pastel: Well we finished the whole thing. Teacher: Yeah, you finished the whole artwork in one day. Pastel: Wow.</p> <p><b>In the middle, changed plans:</b></p> <p>Teacher: Oh, I thought you're making a unicorn horn? Pastel: I wanted to but I can't. I shouldn't do it because I think cannot right now. I will not give up. I'll make clouds instead. Teacher: OK. So that's a good decision. Pastel: I did good. Teacher: I think it's a really positive picture.</p>

<p>5/2 #8</p>	<p>Beginning: worried End: little worried Prompt: 151 Did SI Help: n/a Reported that she didn't really need to use them today</p> 	<p><b>Theme:</b></p> <p>Pastel: I am a healer. Because I heal people, but sadly I cannot heal my stomach.</p> <p><b>SI:</b></p> <p>Pastel: I'm drawing a med kit because you know how healing involves med kits?</p> <p>Teacher: Yes. Seems like a good thing to have.</p> <p>Pastel: Look at it. It's beautiful. I'm going to draw the med kit sign with different colors. [student continues to work]</p> <p>There you go. It's like a med kit bag. You know those med kit bags with the straps? That's what I drew. And then the plus sign. You know those plus signs they have? The signs for healing in games and stuff....[ long pause]... I'm fixing up the med kit right now. I'm blending some stuff together. What's that sound? There you go. Now I'm going to mix it up with a bit of the white in here that I have. See I'm blending this in.</p> <p>Teacher: That's a nice detail.</p> <p>Pastel: White is a blending color. So I use it to blend it in so the med kit still looks white but everything's just blended in. But I need white to blend this in for sure. So then that's blended in. And I use white to blend these in. And that, too. I'll make another one. I'll make a big one. I'm going to make the big one. How much more time do we have left?</p> <p><b>Did not realize she used scripting:</b></p> <p>Teacher: So what do you think? Using your scripts and talking through your work helpful?</p> <p>Pastel: Not really because we didn't really use them.</p> <p>Teacher: Did you use them? I heard you use them.</p> <p>Pastel: No. I wasn't, was I?</p> <p>Teacher: When you were talking through your coloring?</p> <p>Pastel:: Well, not so much; I didn't notice. Yeah, I did then, when I was thinking.</p>
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**Student Self-Reflection Ratings During Individual SI Sessions**  
Before and After using the SI technique.



Great: Very Confident    Good: little worry    Ok: worried    Upset: Very Worried    Badly: Unconfident

\*\*\* When a student has picked more than one rating the lower, or more colored in response is recorded

**Pastel SI Training Self- Reflection**


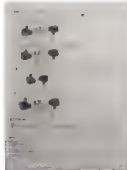

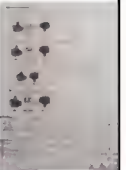
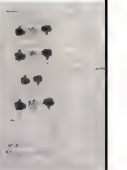
Session #	Before starting	After Self-Instruction
1		
2		
3		
4		
5		
6		
7		
8		



**Pastel Class Observations Data Matrix**

Date	2/22	3/2	3/10/22	3/18/22	3/28/22	4/5/22	4/20/22 end
Class theme/objective	Self-portrait on ceramic tile (tradition for 5th grade)	Self-portrait on ceramic tile	Worked independently to finish tile while teacher introduced a new project	Began exploring and practicing paper cutting traditions and techniques	Time given to finish previous projects and pick a work to display in the art show	Continued paper cutting traditions project. Focus on emphasis and using contrast	Finished paper cutting traditions project.  Self reflection and assessment
Materials	Pencil and Glaze on ceramic tile	Pencil and Glaze on ceramic tile	Pencil and Glaze on ceramic tile	Color paper, glue scissors	Various Colored pencil	Colored paper, glue, scissors	Color paper, pencil, paper, markers
Maladaptive behaviors observed	Yes	Yes	Yes	No	Yes	No	No
Type of behavior	Negative self-talk  Avoidance behavior  Discard/Damaged Work: Erased work	Negative self-talk	Other: attention seeking behaviors	N/A	Avoidance behavior	N/A	N/A
Keywords in Negative self-talk if overheard	So bad Terrible I can't  Never work The worst It's not right 'Can you just do it?'	Embarrassing Terrible Wrong 'Colors gross' 'I can't make it look good' bad	Doesn't look good  Needs to be perfect  bad	n/a	n/a	n/a	n/a
Coping technique attempted	Yes	Yes	No	Yes	Yes	No	Yes
Technique attempted	Break  Other attempts: teacher worked one-on-one with student	Self instruction  Teacher guided student	N/A	Self instruction	Self instruction  Break	N/A	Self instruction

Accommodation made/ needed	Reference packet Directed drawing with teacher	Teacher proximity for majority of class for reassurance	Visual schedule and checklist	n/a	n/a	n/a	n/a
Teacher perceptions on student independence	Visibly worried, little to no independence shown Very reliant on teacher support	Started off independently - worked consistently until glaze dried  Began to worry over its appearance  Needed constant reassurance that glaze will change in the kiln as discussed and sampled at the beginning of class	Student needed me to review the checklist created and listen to her read it aloud before she could work independently - she did not need reminders after that.	Highly independent today, participated in-class discussion and did not need extra clarification.  Utilized the resources given to stay on track, during teacher check-in Pastel was positive and did not seek out my validation (a big deal for her!) No avoidance or discarded work	Was not able to use SI strategies independently Pastel needed extra support  Forgot how to self generate them SI statements  Needed teacher reassurance several times  <b>Did Not use negative self-talk</b>	Student worked independently upon arrival to class.  Reflection she noted she had been worried only because of her lateness, and the fact she was leaving school early to visit the doctors that had her worried  She did not worry about her actual work today and said she did not need her technique	Pastel sought out advice from peers when stuck on a technique.  Did not ask anyone to cut for her (historically when asking for help she may expect someone to draw or cut for her)  She did not need to talk to me to fix this problem
Other notes	Teacher took a tally of negative self-talk used in a 4-5 minute interaction when this behavior started cycling  Students used negative phrasing about 28 times during the course of 4-5 minutes with direct teacher support throughout.	I think Pastel understood that the glaze would change - but the shock of it caused worry  No SI training yet - the teacher talked the student through creating an error statement to help her reassure herself that her final project will look different.	Looking for reassurance that she did well and it looked good at the end of class, Pastel always seeks adult approval upon finishing artworks.	Student in a positive mood today highly independent	This class seemed considerably harder for Pastel, I believe it may be because she missed our last two training sessions and forgot how to utilize the SI strategy  Did not use negative self-talk aloud but needed constant reassurance	Not present long enough in class to fully participate for long	n/a

student Reflection notes	n/a Before training began	n/a Before training began	"I forgot to use my sentence thing, you [teacher] were working with other people and it is hard to work on something different."	"Everything is fine"  * used SI today, reported it was helpful	"no everything is ok"  * Became worried in class, but did not use SI technique	"no but I am leaving early."  * student only present for 15 minutes in class did not have time to do much	SI technique was used and reported as helpful
Student Exit ticket	n/a	n/a					

### Student Reflection: In-Class self-report



\* Blank = no answer      N/A if SI not used

Questions asked:

1. I made an artwork today:
2. I felt worried or unsure today when I was making art.
3. I thought about, said, or read the sentences  
I made to help me if things got hard?
4. If you used your sentences, did they help?

### Pastel class self-reflections

Date	#1	#2	#3	#4
3/10/22				N/A
3/18/22				
3/28/22				N/A
4/5/22 * late to class				N/A
4/20/22				

**Pastel Interview I****Interview 1 Questions**

1. For the purpose of this study I need to give you an amazing code name to keep your secret identity, do you have a secret code name in mind? If not, do you mind if I pick one for you?
2. I wanted to ask you to tell me a few things that you love to do. Did you have to work hard to learn any of these things?
  - a. Was there ever a time that \_\_\_\_\_ was really hard for you?
  - b. What did you do?
3. What do you think about making, or looking at art?
4. Do you ever make art outside of school? If so, what kind?
5. Do you think art is something everyone can do? Why or why not?
6. I want to talk to you about our art class. How do you feel about the work you do in art class? Why do you feel that way? We can look at your most recent artwork if you want to.
7. Do you ever feel worried in art class about your abilities?
8. Would you call yourself an artist? Why or why not?
9. What do you do when you get too worried or stressed?
10. Are there any art activities you really do not like? If so, which materials frustrate you? What about them frustrates you?
11. Do you think the way you feel about art or making things can change?

**Pastel Interview I**

Question #	Keywords and phrases	Quotes
1	Pastel	
2	Singing, Dancing, art	
2a	Yes (to all)	
3	When you make art and look at others' art you can understand how much work and emotion comes from it better than if you do not make your own artwork.	<p><b>Appreciation of artmaking:</b></p> <p>“So you finally understand when you – you go to a museum right before you’re going to start painting again. And you go, “Oh my god, I understand now how hard and how much soul and how much effort has been put into this painting.”.”</p> <p>“I really love it. It’s calming and it’s really beautiful. And it helps express emotions. Like if you don’t want to talk about it, you could do something with art. You can make light colors to show that you’re happy, dark colors to show that you’re sad. Or mix, or just something colors you like to show that you’re OK. And art can be shown in a lot of different ways. And that’s why I really think it’s really cool. Because there are different ways to express your emotions. And one of them is art.”</p>

4	Yes, painting, drawing	
5	Yes - if they want to. Accommodations when needed Different ways to make art Disability and the arts	<p>"But yes I do think I do certify. I do think everybody could do this."</p> <p>But I do think art is possible for everybody to do. It just depends if you want to do it. Because you have a choice in life to say, "Hey I want to do this for art." Or, "No, I'll save this for later."</p>
6	Mess up Great Not great	<p>"I feel like the art I do in art class is – you've seen me when I mess up, right?"</p> <p>I feel like if – when I try to do something good and I feel like I'm doing a good job, I think it's great. And then I don't think I'm doing a good job. It might not be thought of that as great."</p>
7	<p>Sometimes - I feel good, great, proud</p> <p>I can: Mess up Anger Not good Can't erase Can't fix Smudge Permanent Mistake Impossible</p>	<p>"...but you know like when you like do something and it's like really important, there's no going back. You know? And then you accidentally smudge and then you're like, "Oh, no, what am I going to do?" There's nothing like you're already on painting, you're already on markers. You can't fix that, you can't erase it. That's impossible. ...you cannot erase paint. You cannot erase you can't erase like markers or paint or something like that, or anything...or anything that is permanent and cannot be erased. So you're not going to feel too confident if you make a huge mistake."</p> <p>"But later I can really mess up and I can feel bad, and not because of the art, can feel sad not because of the art. Or mad. I'm like, "I hate art. I'm not doing art right now. It sucks." Which I don't mean. It's just how I feel. So not really. I will always love art in my mind or in my heart. But if something were to take that, I would go back to loving art. For a period of time I would probably feel like that."</p> <p>Mentioned we are going to try and work on changing how we think when worried- student responded: "And I just want to be like – I don't want to have any anger over anything or something. So I'm thinking if we can do this, and you can give me something and I can do it, if I see a smudge, I'm not going to go, "Oh my god we need to fix it right now." I'm going to go, "That's fine. I'll make a cloud there or a heart and something to cover it. And make it look like it was supposed to be there instead of freaking out and ruining it."</p>
8	<p>No =- not an artist Real artist = can make something no one can copy</p> <p>Sometimes</p>	<p>So like imagine I draw a little sun on the canvas or I draw a little sun. Anybody could do that. So I'm not going to call myself an artist. I'm just going to be proud, because that looks really good and I feel like I didn't mess up. And then somebody else could just copy that, like, "Ooh, that looks nice."</p> <p>Researcher clarification: "So from what I'm hearing from you is that you sometimes feel like an artist when you make certain things. But not always."</p>
9	Crying when stressed Worries over others reactions to what she tells or reports to	

	them Use fidgets to calm down	
<b>10</b>	N/a forgot to ask	
<b>11</b>	Can feel proud, or bad,  Go back to feeling good about it	“But later I can really mess up and I can feel bad, and not because of the art, can feel sad not because of the art. Or mad. I'm like, "I hate art. I'm not doing art right now. It sucks." Which I don't mean. It's just how I feel. So not really. I will always love art in my mind or in my heart. But if something were to take that, I would go back to loving art. For a period of time, I would probably feel like that.”
		<p><b>Words used associated with self-doubt:</b></p> <p>Bad, Horrible, Mess up, Anger, Not good, Can't erase, Can't fix, Can't, Smudge, Permanent, Mistake, Impossible</p>

## Interview II

1. The last time I asked you to tell me about your ideas, you told me you thought art ( is or is not) something everyone can do. Do you still think that is true? Why or why not?
2. How are your feelings about art right now? Do you think you can make art? Why or why not? We can look at your most recent artwork if you want to.
3. We have been working together to create helpful self-statements or helpful sentences by writing, reading, and thinking about what we are doing, and what we can tell ourselves when making art gets hard or we start to worry. I want to ask you a little more about that if that is ok?
  - a. We have been trying to look and listen carefully to the words we use when we are working to make sure the words we use to talk to ourselves are kind and helpful. Do you think it is important to think about the words we think and say about ourselves?
  - b. How did you feel about writing your own self-statements or ‘helpful sentences’? Was this really hard for you to do? Did it get easier to do with practice?
  - c. Do you think repeating these sentences out loud or in your head when you make art is helpful? Why?
    - i. If a student mentions or infers the use of an error script: I think you are talking about making an error script. When we dislike how things are going or make a mistake and talk about it and how it could change, we are using our sentences to correct an error. Did you find error scripts helpful?
  - d. You reported trying/ not really using this technique in regular art class, how did you feel about using your self-scripts in class?

- e. Have you tried, or will you try, this technique when you make artwork at home or for any other reason?
4. Was there an art activity prompt that we have done that you really liked and made you feel good or confident in your abilities? Why do you think it made you feel that way?
5. Are there any art activities we did during one of our weekly sessions you did not like? If so, what made you dislike it?
6. Do you think any of the things we have been practicing, like making small artworks, practicing self-statements, and trying to change our words, have been helpful?
  - a. Have you noticed any changes in your feelings or ability to get started?
7. Do you think you can or will still use this technique now that the study is over?

### Pastel Interview II

Question #	Keywords and phrases	Quotes
1	Yes if they choose too  Anyone can	<b>Is art still for everyone?</b> Do you still think that's true?  Pastel: Yes. Teacher: Why? Pastel: Well because everyone has a choice. It's their choice. If they choose not to do it, they don't need to. But I bet anybody, anybody could do it.
2	Positive  Confident  good	<b>How are your feelings about art right now?</b>  So, how are your feelings about art right now? Do you think that you can make art?  Pastel: Yes. Teacher: Yeah? Pastel: I'm making art right now. Teacher: You are literally making art. That's true. How do you feel about your ability to make art? Or How you are making art? Pastel: I feel good about it. Teacher: You feel good about it? Pastel: So far I didn't have to tell myself like I can do it, let's fix it. Teacher: Oh, so like even this one right now, you're feeling like it's going pretty confidently in general? Cool. Good to know.
3 a	Yes, words are important if you talk badly you will stop trying  You will think you can not do things well  Not thinking deeply enough	<b>Is it important to think about the words you use?</b>  <b>So do you think it's important to think about the words we think and say to ourselves?</b>  Pastel: Yeah. Because you're the one that's trying to, you know, make yourself excited, and make yourself feel better. By talking to yourself, you're trying to make yourself feel better about your artwork is what we've been doing. Like let's see if I put blue right in there, there was a line of blue. [Painting and using SI as we conduct our interview] And I could say how could I fix this? I can make this I can make a rainbow. Like

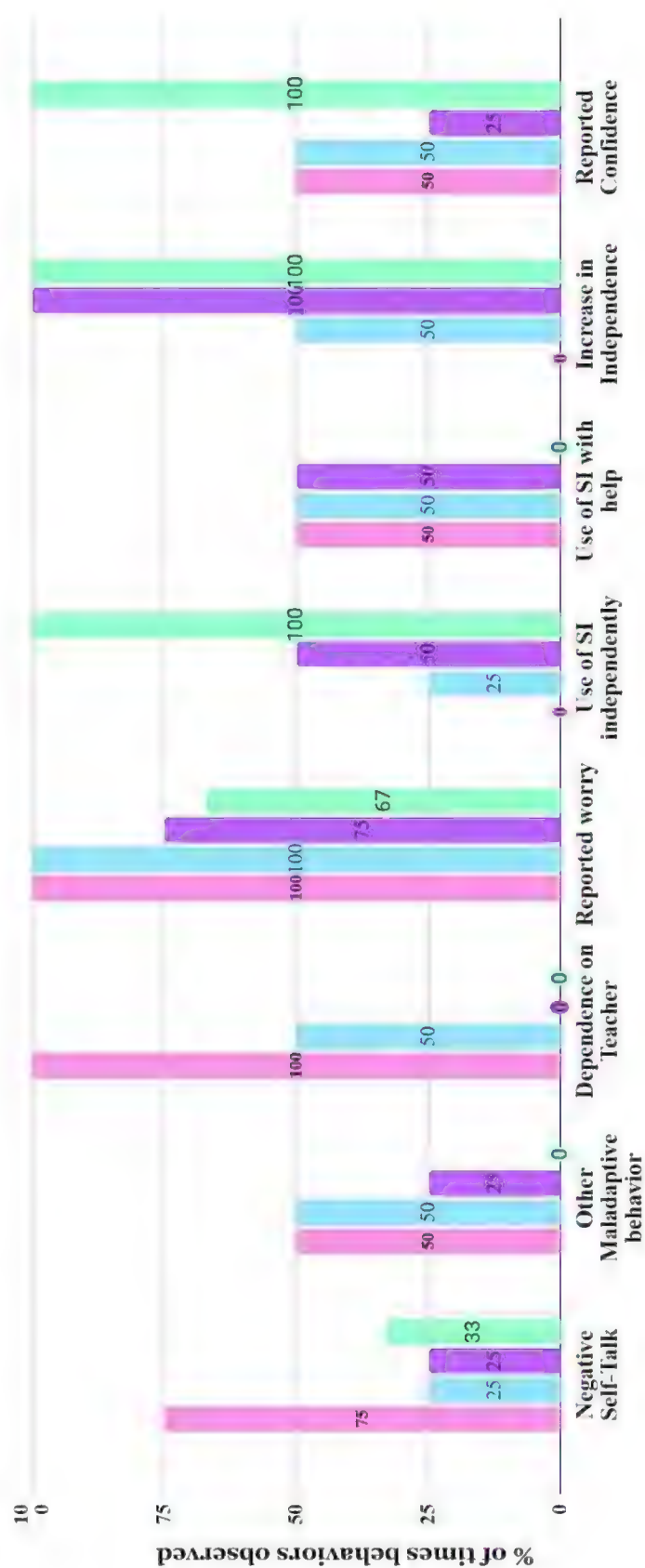
	<p>causes doubt</p> <p>Give up because of negative thoughts.</p>	<p>just start it from there so it's a line rainbow, and the arch rainbow. And I don't know, maybe that's an art idea. Maybe I'll do that.</p> <p>Teacher: Maybe you could.</p> <p>Pastel: But not now. I'm too –</p> <p>Teacher: But what if you happened to what if you said something so those were – those statements that you were just making were like positive statements to reassure yourself.</p> <p>Pastel: Why would you say something bad to yourself about your art?</p> <p>Teacher: But sometimes people do, right? Can you think back to times when you had done that in the past?</p> <p>Pastel: Well yes.... People do. But that's the people that think that, "Oh no. It's completely ruined." And there's nothing like – nothing like – if you hit rock bottom on your painting, there is nothing you can do to fix it. Even though there is white out.</p> <p>Teacher: Is that ever true, that there's nothing you can do to fix it?</p> <p>Pastel: No. But that's what people make themselves think, which makes them be like, "Oh no. This is horrible." Because if they see an opportunity, they're like, "OK. I'll do that opportunity."</p> <p>But if they're those type of people that just know, that just know, they don't actually think about this deeply. To think, "Oh wait. Here's an idea." They just make themselves think, "Oh no, it is ruined. No fixing it. Just ruined."</p>
3b	<p>It was weird</p> <p>Uncomfortable</p> <p>I didn't get it at first</p> <p>Then it made it comfortable and made art comfortable.</p>	<p><b>What were writing self-statements like?</b></p> <p>Pastel: At first when we were doing this technique it was a little weird. Little weird.</p> <p>Teacher: I agree.</p> <p>Pastel: Especially the part – especially the part – and you're like watch me talk to myself. That was weird.</p> <p>Teacher: Yeah. It is a little strange. To do that.</p> <p>Pastel: But now I'm a little more comfortable. Now I'm a little more comfortable, because we've been doing this for months. A little more comfortable because I understand the process. Before I was just confused and new to this. I didn't understand how we would do this process.</p> <p>But now that I know we say kind things to ourselves to make ourselves feel better and our for if we mess up, which you can't really mess up in art. But if we think we mess up, we use them to stay calm and think.</p> <p><b>Got easier?</b></p> <p>Pastel: Well it did. It did, but that's only because I started to understand the process.</p> <p><b>Pastel's opinion about how others would do learning this technique:</b></p> <p>Pastel: But for other kids, it's a little harder. But I feel like everyone would understand. It just takes a matter of time. Because like I said, people are different. People are different. They don't maybe some people understand quicker than others. Some don't. Like I understood the first time. But another but an example, another kid could understand in a month or two. That would still be OK, because this process is so easy to follow, even if they didn't know what to do they would still be able to follow.</p> <p>Teacher: All right. Thanks.</p> <p>Pastel: This is all true.</p> <p>Teacher: I believe you. I know you wouldn't lie to me.</p> <p>Pastel: I wouldn't.</p>
3c	<p>Mostly beneficial when you feel doubt</p>	<p><b>Do you think repeating them out loud and in your head was helpful?</b></p> <p>Pastel: Well it depends on what type of my art pieces. Like for example, if I felt</p>



	<p>Helps put you in positive thoughts so you can figure out how to fix things.</p> <p>Not really needed if you already feel positively</p> <p>Good for specific occasions</p>	<p>like I did like a really, really bad one, and talking to myself out loud or in my head helped me feel a bit better and calm down to understand what I can do to fix it and change it. But on the other hand, you know, like it didn't really, really help. Because these are only really needed for like if you feel like doubt.</p> <p>Teacher: OK.</p> <p>Pastel: For yourself. Like if you feel like this painting won't work, if you feel like it won't make it out as a good painting. But if you're already in a positive track, you don't really need them. Because these are like, "How can I fix this?" But you're thinking, how could I make it better?</p> <p>Teacher: Definitely.</p> <p>Pastel: So these are only like sentences to help yourself be positive when you're painting, or when you make a little mistake. Again, put this on the record. You can't make a mistake in art. It's literally art. If you put a splat of paint there with other splats, it will still be a piece of art that you could be proud of.</p> <p>Teacher: All right, thanks. So they were – they were –</p> <p>Pastel: No need to thank me.</p> <p>Teacher: helpful for specific things.</p> <p>Pastel: For specific occasions.</p>
3d	<p>Good</p> <p>Made it easier when worried</p> <p>Comforting</p> <p>Class is supposed to be a challenge.</p> <p>Have to let kids do art themselves so they know they can.</p>	<p><b>How was using it in class?</b></p> <p>Pastel: Well, it felt kind of good. Because in art class, I get kind of like upset if something doesn't turn out. So I do use this technique for art class, because it makes me feel better about my art.</p> <p>Teacher: OK. So you felt like after like you got used to doing it, it was –</p> <p>Pastel: It was easier.</p> <p>Teacher: – helpful for class. I was really hoping that would be true. Because, in like class there are so many people, and I can't I can't always spend as much time helping you quite as much as I would like to sometimes, and I want to make sure you all know how to be independent too, so.</p> <p>Pastel: Yeah. Because in class, it's supposed to be a challenge for kids. Not for the adults to help the kids.</p> <p>Teacher: That's true. Because it is your artwork, and it's not mine. I am here to help you figure out how to do what you want to do.</p> <p>Pastel: Exactly. So I know you would like to help the kids, but you have to let them do it themselves to show that they can do art themselves.</p>
3e	<p>Helped her interact with her brother and improve her work art home</p> <p>Does not always realize she is using it but it helped her think.</p>	<p><b>Have you used SI at home or elsewhere?</b></p> <p>Pastel: I actually do. Because my brother has a [art activity set and materials] And he loves to draw with it with me. And when I make a mistake, I think to myself, how can I fix this picture? How can I make this picture better? And sometimes I don't even realize I'm using this technique. But when I do I close my eyes and I think of the stuff that I write on my list, and just say it out loud. And then it helps me with my picture. [pause] Yeah, but OK.</p> <p>Teacher: I'm so glad to hear that that's been helpful at home. And that you've still been able to use it.</p>

4	<p>Pink fluffy unicorns</p> <p>Liked that they were open-ended and had choices</p>	<b>Was there an art activity you really liked?</b>
5	<p>No</p> <p>Joked about my modeling technique being creepy at first.</p>	<b>One you really didn't like?</b>
6	Yes see question 3	<b>Do you think any of the things we have been practicing, like making small artworks, practicing self-statements, and trying to change our words, have been helpful?</b>
6a	No - ok to get started - helps more later when the plan changes or I forget the plan	<b>Have you noticed any changes in your feelings or ability to get started?</b>
7	Yes plans to	<b>Will you continue to use this now the study is over?</b>
		<p><b>Bonus Quote, Goodbye:</b></p> <p>Pastel: Good bye. Recorder. We are done seeing you.</p> <p>Teacher: [laughs]</p> <p>Pastel: Goodbye. Also one more thing. Put everything I ever told you on the record, but not my secrets, not my secrets.</p> <p>Teacher: [laughs] All right. I'll keep the recorder in check. Your secrets are safe. And everything else is on the record. Goodbye my friend, thank you for being you.</p>

### Pastel's Observed Trends

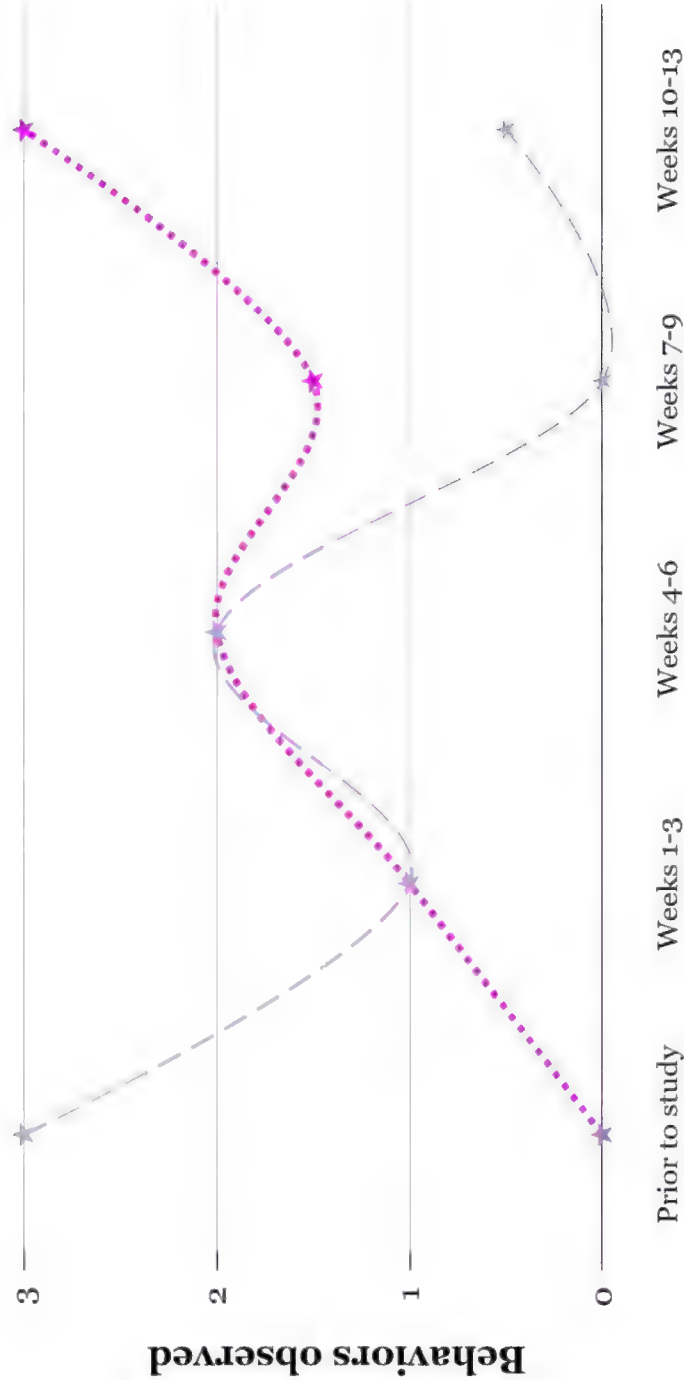


During the weeks of:

Feb. 22nd-March 7th    March 10th-28th    March 31st-April 18th    April 20th-May 2nd

# Pastel Participation in SI and Observed Changes in Confidence and Negative Self-talk

0= Not observed    1= Observe some    2= Observed Majority of the time    3= Observed all the time

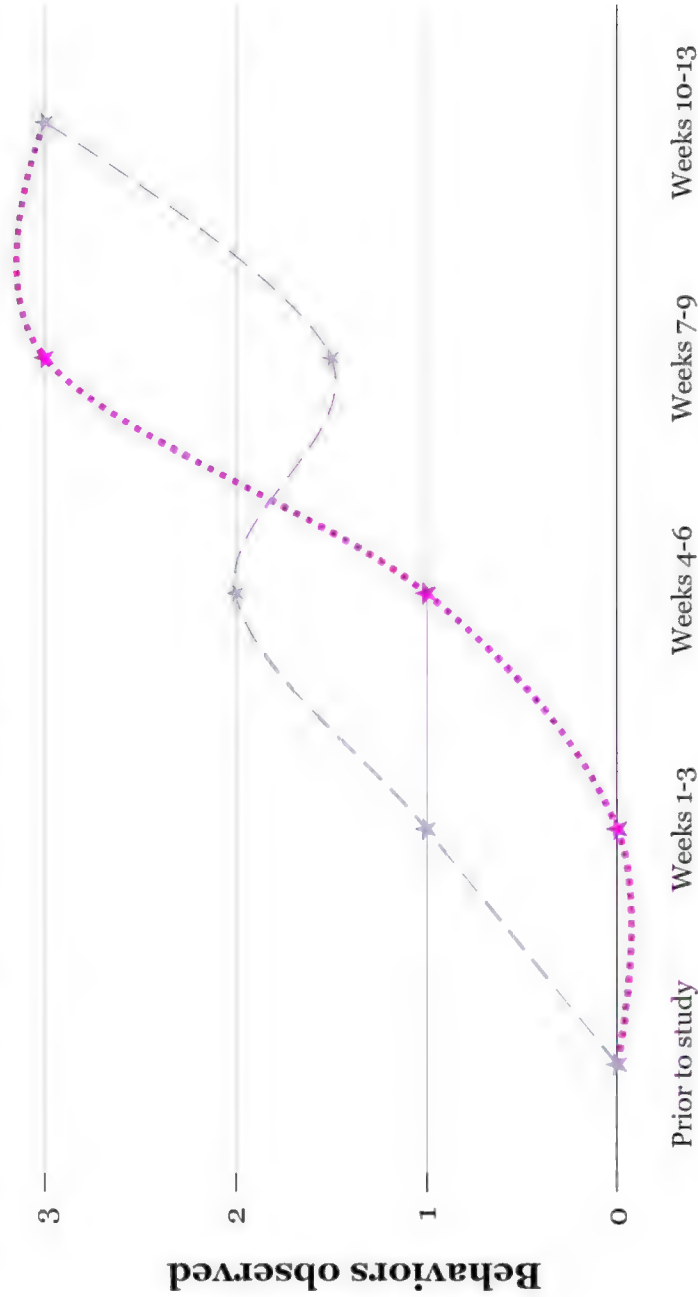


In-Class Observations During the Study

- ★ Pastel Reported Confidence
- ★ Pastel use of negative self-talk

## Pastel Participation in SI and Observed Changes in Confidence

0= Not observed   1= Observe some   2= Observed Majority of the time   3= Observed all the time

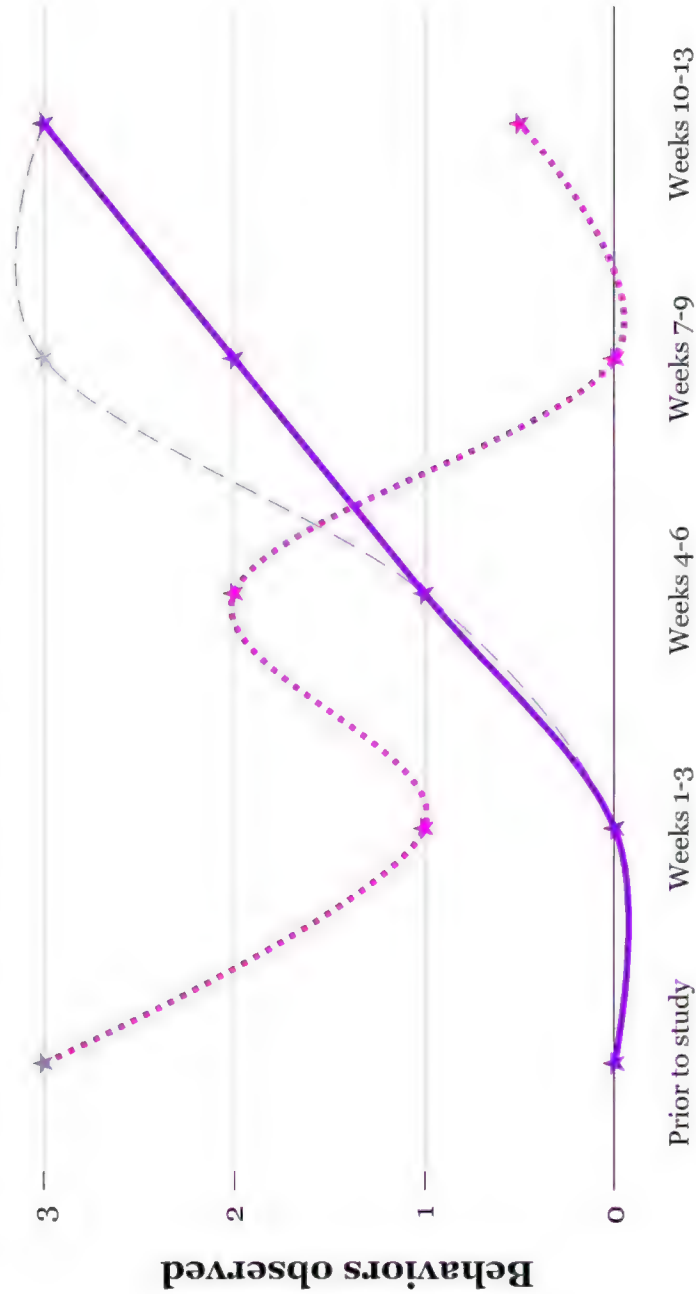


Observations During the Study

★ Pastel use of SI   ★ Pastel Reported Confidence

## Pastel Participation in SI and Observed Changes in Behavior and Independence

0= Not observed   1= Observe some o   2= Observed Majority of the time 3= Observed all the time



In-Class Observations During the Study

- ★ Pastel use of negative self-talk
- ★ Pastel use of SI
- ★ Pastel Independent problem-solving

Photo Log, Observational Protocol  
Student name: Pastel


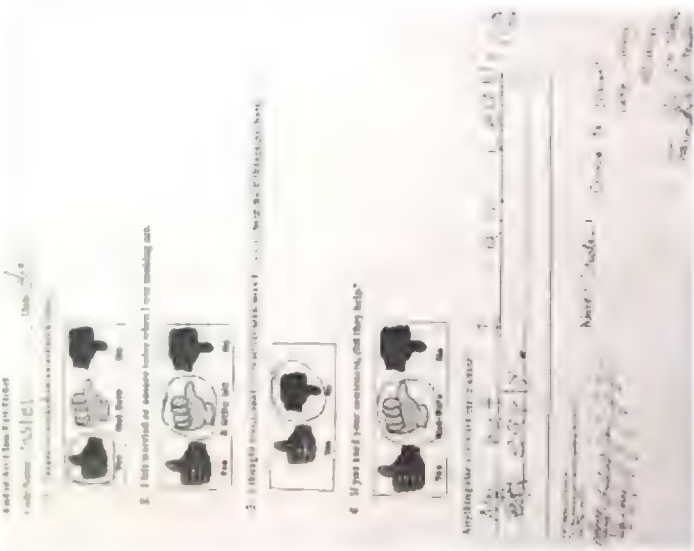
#	Date	Type	Photographs and Notes
1	3.3	1	 <p>Session 1 prompt 11</p> <p>The photograph shows a worksheet titled 'Session 1 prompt 11' with a drawing of a girl and a series of five smiley faces. The girl is wearing a yellow shirt and a purple headband. The smiley faces are arranged in a row, with the first one being a simple smile and the others showing different expressions. The worksheet also includes a section for 'Add more to this' with a drawing of a girl and a series of five smiley faces.</p>
2	3.7	1	 <p>Session 2 Prompt 11 continued</p> <p>The photograph shows a worksheet titled 'Session 2 Prompt 11 continued' with a drawing of a girl and a series of five smiley faces. The girl is wearing a yellow shirt and a purple headband. The smiley faces are arranged in a row, with the first one being a simple smile and the others showing different expressions. The worksheet also includes a section for 'Add more to this' with a drawing of a girl and a series of five smiley faces.</p>

#	Date	Type	Photographs and Notes
5	3-28	C	



#	Date	Type	Photographs and Notes
3	3-10	C	
4	3-18	C	



#	Date	Type	Photographs and Notes
6	3/28	1	<p>Session 3 prompt 10</p>   
7	3/31	1	<p>Session 4 prompt</p>   

#	Date	Type	Photographs and Notes
8	4-4	1	
9	4/5	C	

Pastel's Photo log \* Type of session 1- Individual Session, C- Class Session

Date	Type	Photographs and Notes	Date	Type	Photographs and Notes
4/18	I	 <p>Session 6 prompt 6</p> <p>Hand-drawn worksheet titled "Session 6 prompt 6" featuring a rainbow at the top right, a central box with a drawing of a person, and a row of five smiley faces at the bottom. The text "Let's try to help!" is visible on the left.</p>	4/20 /22	C	 <p>End of Art Class Feedback</p> <p>Hand-drawn worksheet titled "End of Art Class Feedback" with a date of 4/22/22. It includes a section for "What I liked" and "What I didn't like" with thumbs up and down icons. The text "I thought about how to feel the experience I had, to help me if things get hard." is written in the middle. The bottom section asks "If you could your experience, did they help?" with more thumbs up and down icons.</p>

Pastel's Photo log \*Type of session I- Individual Session, C- Class Session

ID	Date	Type	Photographs and Notes	Type	Photographs and Notes
1	4/25	1		1	
2				3	

#	Date	Type	Photographs and Notes
1	5/12	1	 <p>Interview II</p>

#	Date	Type	Photographs and Notes
1	5/2	1	 <p>Session 8 Prompt #15</p>



## APPENDIX H: Raptor's Coded Data

### Raptor's Timeline

C- In-class data

SI - Individual Session 10 Observations

2/28	3/4	3/8	3/15	3/16	3/29	4/1	4/5	4/18	4/19
C	SI 1	C	SI 2	C	SI 3	C	SI 4	C	SI 5

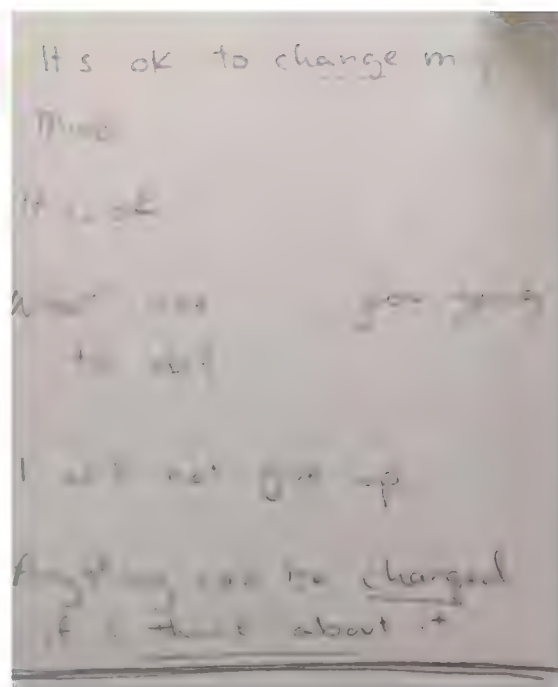
### Timeline Key

Observed or Reported instances of:

Negative Self-talk	Other Maladaptive behavior	Reported worry	Independent problem solving and reassurance	Dependence on teacher for support	Positive report of change after SI use/ SI was helpful	SI used with help	SI used independently	Decrease in attention-seeking behavior/increase in independence when working
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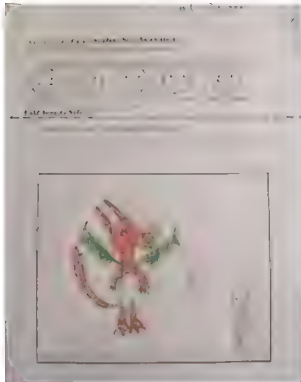



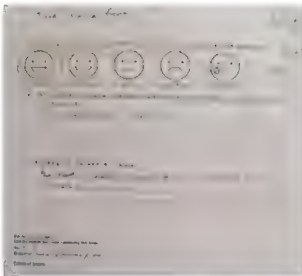
### Written Self-statements




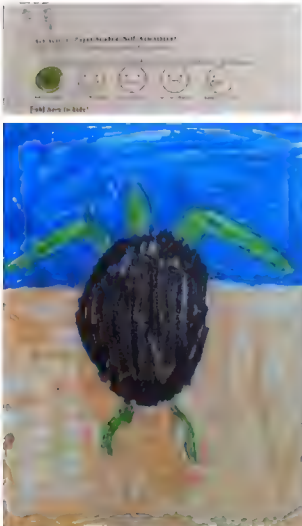
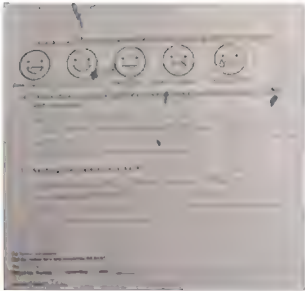
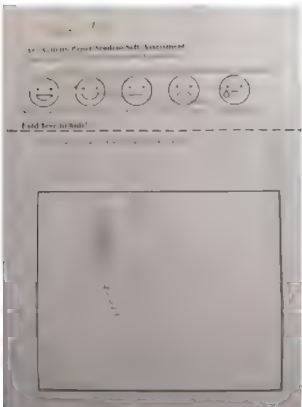

<b>Raptor</b>
I am great
It is ok to change my mind
It is ok.
What are you going to do?
I will not give up.
Anything can be changed if I think about it.



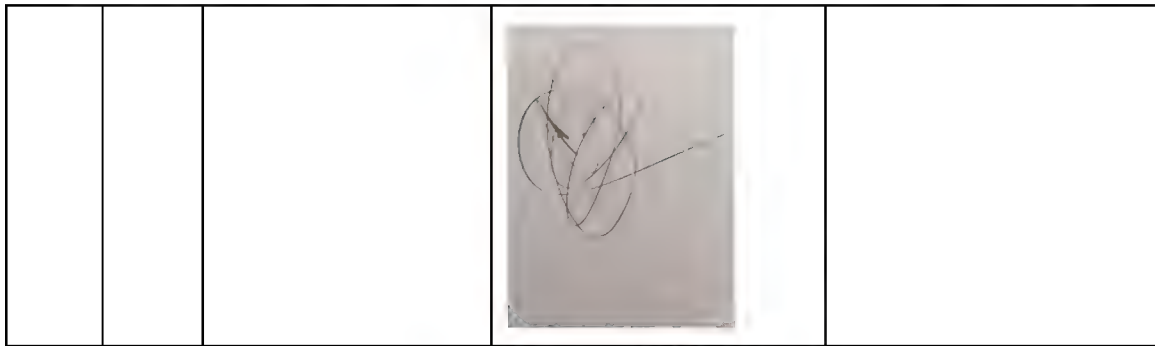
**Raptor SI Session Self-reflection matrix**

\* = indicates teacher added notes

Date	Session #	Key Points and words	Beginning	After Using SI
3/4	1	<p>Beginning: Worried End: Confident</p> <p>Prompt: Used:</p> <p>Did SI Help: yes</p> <p>* The student partly used SI with teacher help.</p>		
3/15	2	<p>2nd attempt Beginning: worried (started student changed smile continuously) End: Confident</p> <p>Prompt: free choice Used: marker and pencil</p> <p>Did SI Help: 2nd attempt: yes</p> <p>“Because I liked it.” * Only very briefly used the technique with teacher support</p> <p>1st attempt: Tried using prompt #2 Prompts frustrated student changed to free choice drawing. Resistant to trying SI technique. Became frustrated - didn't want to talk when frustrated Showed Negative mindset</p>	 	

3/29	3	<p>Beginning: <b>confident</b> End: N/A</p> <p>Prompt: free choice Used: pencil parker</p> <p>Did SI Help: N/A</p> <p>Directed drawing is used in order to try to have the student participate. He did not use the SI technique</p> <p>3 different attempts,</p>	 	
4/5	4	<p>Beginning: <b>Confident</b> End: <b>Confident</b></p> <p>Prompt: finished sea turtle ) color) Used: marker</p> <p>Did SI Help: Yes</p> <p>A little I don't know why It made me feel less stressed.</p> <p>* Only used SI part of the time, limited display</p>		
4/19	5	<p>Beginning: <b>Confident</b> End: N/A did not use technique</p> <p>Prompt: free choice drawing ( directed drawing videos) Used: pencil</p> <p>Did SI Help: N/A Not used</p>		 <p>* the student did not attempt to use or allow me to review the SI technique. Was not utilized, the student decided not to finish an artwork today</p>









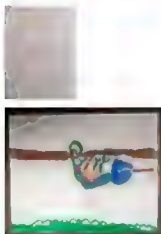
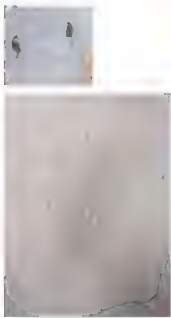
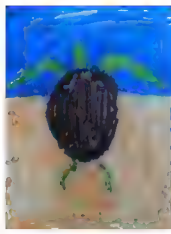





### Raptor SI Sessions Observational and Transcription Data Matrix


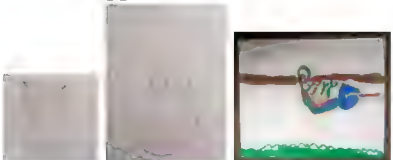

Date	3/4/22	3/15/22	3/29/22	4/5/22	4/19/22
Session	1	2	3	4	5 Data collection ended
Prompt #	n/a - students choice	n/a - students choice	n/a - students choice	n/a - students choice	n/a - students choice
Materials	Color pencil	Pencil, marker	Pencil, marker	marker	pencil
Maladaptive behaviors observed	Yes	Yes	Yes	No	Yes
Type of behavior	Negative self talk Avoidance behavior Other: distraction	Negative self talk Avoidance behavior Discarded work Other: became silent	Negative self talk Avoidance behavior Discard - starting over continuously Other: Became silent when frustrated	N/A	Negative self talk Avoidance behavior Discard Damaged work Other: decided to stop working altogether
Negative self-talk if used	Oh no Wrong	No its not (ok) I give up I'm drawing something different	Bad, No confidence	n/a	I don't like this It will be worse
Non verbal signs of self-doubt	Frown, annoyed expressions, Grumbling	Erasing everything Frown	grumbled Switching videos from	Staring wide eyed at something with a frown	Avoidance Unresponsive


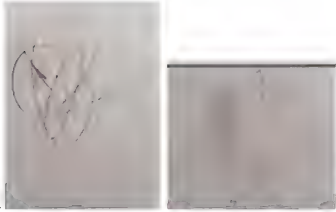
	Tried to distract himself and the teacher.	Stopped talking	directed drawings		
SI technique used with teacher help or independently	Help	Help  Other: teacher attempted to guide student through error script - student resisted on first two drawing attempts	Other: not used at all - teacher attempted to guide student through error script - student resisted	Help	Other: not used at all - teacher attempted to guide student through error script - student resisted
Observed or reported results while using SI	Student persevered in drawing - did not start over with teacher help - talked self through changes	Started by giving himself positive self-statements  Students started out strong using SI to help talk through sessions and errors but gave up on error scripts after the first two, when the 3rd did not immediately change the result of his drawing. Resisted using the technique again	Resistant to talking at all when frustrated. Attempted to walk him through an error script a few times with very little result	Observed - student visibly calmed down continued working	Resistant to trying
Other coping techniques attempted	n/a	Start something new	Attempted small breaks  Start something new	Start something new	Changing directed drawing videos  Start something new
Other Observations	Student did not think of this strategy as a serious technique and teased teacher while demonstrating, and resisted trying it out loud because it felt silly - very sarcastic when using self-statements		Student is very talkative about everything but doesn't like to talk when frustrated, and is resistant to using SI sentences I helped him create - he has not 'bought into the idea yet it seems.  Student is resistant to	I convinced the student not to use directed drawings.  He colored in an artwork he drew at the end of our last session and we casually talked. When he made small errors I tried to subtly guide his thinking using an error scripting	I originally told him we would not be using direct drawing because I saw it frustrated him. - I allowed him to after I saw signs of frustration and avoidance was escalating. Remind him if he gets frustrated to stop and think before continuing. Once

			<p>participating without using directed drawing youtube videos. Knows this is supposed to be a time he can draw things he wants, and this is all he wants to do. A new focus.</p>	<p>template I came up with.</p> <p>Partly successful, he enjoyed talking</p> <p>Told me about some events he was frustrated with or worried about in the future</p> <p>No real use of SI independently</p>	<p>Directed drawings began he became predictably frustrated.</p>
Self-reflection Before starting	 Upset: Very Worried	 Ok: worried	 Great: Confident	 Great: Confident	 Great: Confident
Self-reflection after using SI	 Great: Confident	 Great: Confident	N/A	N/A	N/A
Work at the end of the session					
Keywords used in session or reflection	<b>Reflection:</b> Raptor: Probably fine if I didn't use it , it was a little helpful		n/a	n/a	n/a

**Raptor SI Session Self-reflection matrix**

\* = indicates teacher added notes

Date	Key Points and words	Beginning
3/4 #1	Beginning: Worried End: Confident Did SI Help: yes * The student partly used SI with teacher help. 	n/a
3/15 #2	2nd attempt Beginning: worried ( started student changed smile continuously) End: Confident Prompt: free choice Did SI Help: 2nd attempt: yes  “Because I liked it.” * Only very briefly used the technique with teacher support 	<b>Negative self talk example:</b>  Raptor: Wait, I can just do not do one and make this – just make it a circle. Ugh.  Teacher: It’s going to be OK.  Raptor: No, it’s not.
3/29 #3	Beginning: confident End: N/A Prompt: free choice Did SI Help: N/A Directed drawing is used in order to try to have the student participate. He did not use the SI technique 	<b>After making lines he was unhappy with and looking more upset, the teacher asked if he would like some help.</b>  <b>Raptor:</b> “Yes. It’s not [fun to] draw[this part].” [pointed to a spot on the paper]
4/5 #4	Beginning: Confident End: Confident Prompt: finished sea turtle ) color) Did SI Help: Yes A little I don't know why It made me feel less stressed. * Only used SI part of the time, limited display	<b>Reflection:</b> Teacher: I asked you some questions about why you made the decisions you made and when you were practicing talking out loud about the decisions you're making do you think that was helpful? Raptor: Yes. A little bit.

		
4/19	Beginning: <b>Confident</b> End: N/A did not use technique Prompt: free choice drawing ( directed drawing videos) Did SI Help: N/A Not used	 n/a

### Student self-reflection ratings during Individual sessions

Before and After using the SI technique.



Great: Very Confident Good: little worry Ok: worried Upset: Very Worried Badly: Unconfident

\*\*\* When a student has picked more than one rating the lower, or more colored in response is recorded

Raptor \*\* = did not attempt to practice SI

Session #	Before starting	After Self-Instruction
1		
2	*2nd attempt	*observe d SI for part
3		**
4		**
5		** collection ended

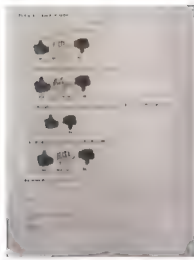
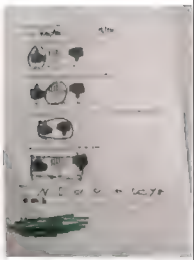
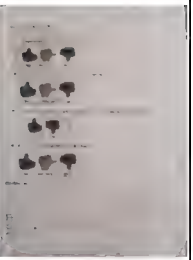
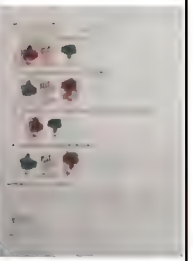


**Raptor In-Class Observations Data Matrix**

\* Highlighted answers indicate that strategy or behavior was observed

Date	2/28	3/8	3/16	4/1	4/18 end
Class theme/objective	Introduction to style, and pop art. begin creating a self-portrait using a style influenced by various cartoons and comic artists	Learn about basic facial proportions, and talk about changes made to these proportions in other media. Drawing the features of a cartoon self portrait in our own exaggerated Style.	Continue to work on a comic/cartoon styled self portrait, adding color	Continuing and finishing up self portrait  Checking craftsmanship, framing portraits, student self assessment/reflections, sharing with others	Studio day: Finishing self portrait project or any other unfinished work from the year  Early finishers who completed everything - helped other students, helped clean up and organize around the art room
Materials	pencil, paper	pencil, paper, marker, mirror, reference packet	markers	Marker, paint	markers
Maladaptive behaviors observed	Yes	Yes✓	Yes✓	Yes	No✓
Type of behavior	Negative self talk✓  Avoidance behavior✓  Discard ✓  Other: talking/calling out	Avoidance behavior✓	Negative self talk✓  Other: visibably displeased, showing signs he may damage his work	Negative self talk	N/A
Keywords in Negative self-talk if over heard	Bad Terrible I can't Its messed up	Do better	Bad Not perfect Should be perfect	Messy Looks wrong	
Coping technique attempted?	Yes ✓	Yes ✓	Yes ✓	No	No
Technique attempted	Self instruction ✓ with teacher help	Self instruction ✓???	Self instruction ✓ with teacher help	Self instruction with teacher help	Self instruction✓?
Accommodation made/ needed	Allowed student	Reference packet	Visual schedule/	Visual schedule/	Visual schedule/

	<p>to use my eraser (has a preference for the eraser I use)</p> <p>Given an additional paper</p> <p>Extra positive attention given</p> <p>Walked student though using Self-statements</p>	<p>used to help generate ideas and calm student</p>	<p>checklist</p>	<p>checklist</p>	<p>checklist</p>
<p>Teacher perceptions on student independence</p>	<p>Student required a lot of attention to manage his time today and stay calm.</p> <p>Did not show independence.</p>	<p>Required redirection away from avoidance behaviors and negative social interactions with table group</p> <p>After a check-in, Raptor worked independently.</p> <p>Did not display any more attention getting behaviors after we spoke</p>	<p>Students still needed my attention when they were upset. No typical attention seeking behaviors noted (such as running around the room, calling out, arguing loudly with others when I am in proximity)</p> <p>Much more independent today, focused</p>	<p>After initial help thinking through color mixing (skintones) student worked independently for the rest of class</p> <p>Less attention seeking behavior'</p> <p>Helped others</p>	<p>Showed independence and responsibility, helped others in class and helped clean and organize our studio space.</p>
<p>Other notes</p>	<p>After consistent positive reinforcement and attention from the teacher, students were verbally expressing confidence and explaining how he was a wonderful artist again by the end of a class.</p>	<p>Annoyed at his table group today, very invested in how they made their work and how it should be 'better' then it was</p> <p>Exit ticket incomplete, student wanted to be in the front of the line rushed and did not finish filling it out</p>	<p>Reported that he used SI in class to help when the markers stopped working and stressed him out. Teacher guided the student to create an error script.</p>	<p>Still seeing student doubting their abilities. SI training has not been successful due to student resistance to practice using statements.</p> <p>Seeing less attention seeking in the classroom and more positive interaction with peers - particularly when I am helping someone other than Raptor.</p>	

<b>Student Reflection notes</b>	n/a  Forgot to give reflection	The Student said they used the SI technique but forgot to check if it helped. I am unsure if it actually was used, student has been resistant to using the technique in small sessions	* reported SI was used part of the class, unsure if it was helpful  Still unsure this student is using SI	* Reported that he did not use the SI technique	"I did it but I didn't need to because I was just helping other people." * Said he used SI still "maybe it helped me not get annoyed"
<b>Student Exit ticket</b>	n/a				

### Student Reflection: In-Class self-report



\* Blank = no answer N/A if SI not used

Questions asked:

- I made an artwork today:
- I felt worried or unsure today when I was making art.
- I thought about, said, or read the sentences  
I made to help me if things got hard?
- If you used your sentences, did they help

### Raptor

Date	#1	#2	#3	#4
3/8/22				
3/16/22			?	?
4/1/22				n/a
4/18/22				?



### **Interview I Questions**

1. For the purpose of this study I need to give you an amazing code name to keep your identity secret, do you have a secret code name in mind? If not, do you mind if I pick one for you?
2. I wanted to ask you to tell me a few things that you love to do. Did you have to work hard to learn any of these things?
  - a. Was there ever a time that \_\_\_\_\_ was really hard for you?
  - b. What did you do?
3. What do you think about making, or looking at art?
4. Do you ever make art outside of school, if so, what kind?
5. Do you think art is something everyone can do? Why or why not?
6. I want to talk to you about our art class, how do you feel about the work you do in art class?
  - a. Why do you feel that way? We can look at your most recent artwork if you want to.
7. Do you ever feel worried in art class about your abilities?
8. Would you call yourself an artist? Why or why not?
9. What do you do when you get too worried or stressed?
10. Are there any art activities you really do not like?
  - a. If so, which materials frustrate you?
  - b. What about them frustrates you?
11. Do you think the way you feel about art or making things can change?

### **Raptor Interview I**

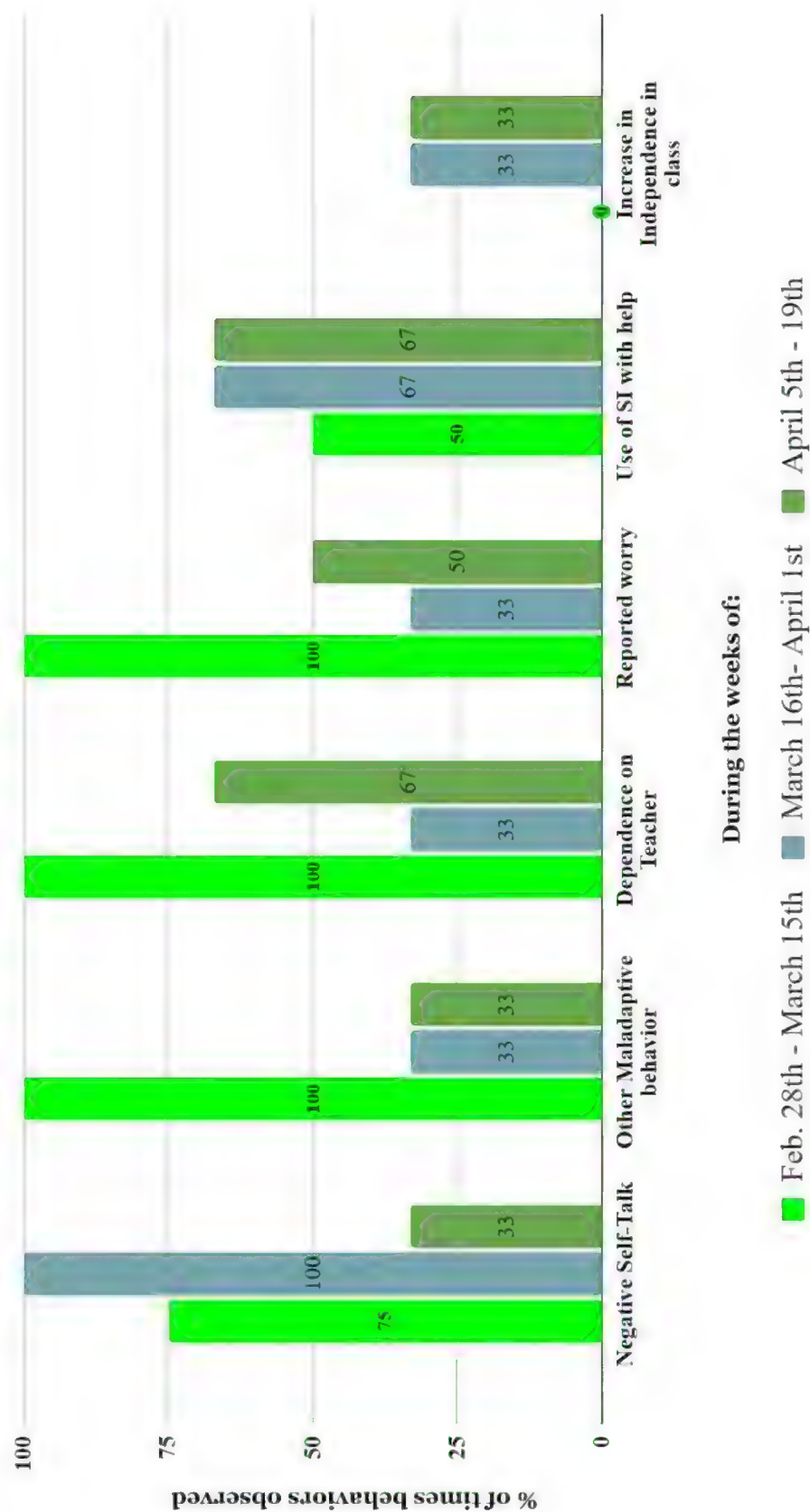
Question #	Keywords and phrases	Quotes
1	Raptor	
2	Run, 'goof off' ( be silly) hang out with friends, fishing, swimming, climbing, Art	
2a	No - it was easy - all of it - very confident about that	
2b	evidence shows differently in the art classroom, but student insists it is all easy - every activity mentioned came naturally without any productive struggle	

3	Makes you feel lots of ways Emotions Happy Sad Groovy	“Art some art makes me feel sad, groovy, mad and that’s really all the emotions it makes me feel. And sometimes it makes my day go along happy as can be.”
4	Animal drawings marker	<p>“Aquarium drawings. Lots of drawings, featured on animals.</p> <p>Teacher: OK, so, a lot of animal drawings. What kind of materials do you like to use then?</p> <p>Raptor: Mostly markers, because they do my best work with markers. “</p>
5	Eventually - everyone can make an artwork	
6	Under pressure Kids telling him what to do Noisy Doesn’t bring on the best in me	<p>“Well, it mostly puts me under pressure, ‘cuz I’m with a lot of kids, and they’re telling me to do this and then and it’s just too noisy for me. I usually like peace and quiet, and so I need to do that to bring out the best in my artwork.</p> <p>Teacher: OK, so, sometimes people in the classroom sometimes make you feel like –</p> <p>Raptor: It doesn’t bring out the best in me.</p>
7	Yes - things are not perfect Weird feeling Need to stop worrying	“I get this weird feeling like, if it’s not curvy enough, I usually erase it, and do another one to make it kind of like perfect, and I need to stop worrying about how my artwork looks, and I just need to really just be calm with it, and I can make it something even more nicer than it looks right now.”
8	Yes - good coloring makes an artist	
9	Get energy out Physical activities	
10	Painting - out of line - ruined	

11	<p>Stuck Might change when teenager</p>	<p>“They’re gonna suck forever.</p> <p>Teacher: You think they’re gonna be stuck that way?  Raptor: Yeah.  Teacher: OK.  Raptor: Except for when I get into like a teenage age because I’m gonna have better dribbling since I’m just eight.  Teacher: OK, so you think it might change eventually.  Raptor: When I’m ten years  Teacher: But it’s not gonna change for a while?  Raptor: Yes.”</p>
	<p><b>Words associated with self-doubt:</b></p> <p>Perfect  Bad  Ruin  Under pressure  Messy</p>	

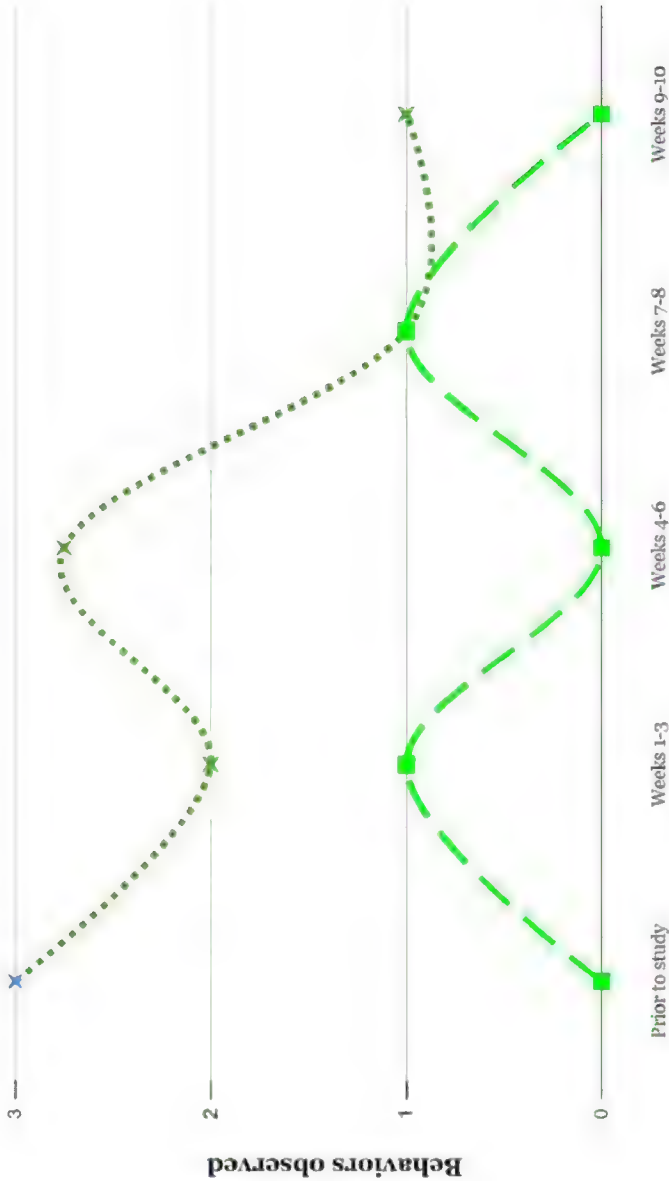
**Note: No Interview II conducted**

### Raptor's Observed Trends



**Raptors Participation in SI and Observed Changes Negative Self-talk During All Session Types**

0= Not observed 1= Observe some 2= Observed Majority of the time 3= Observed all the time

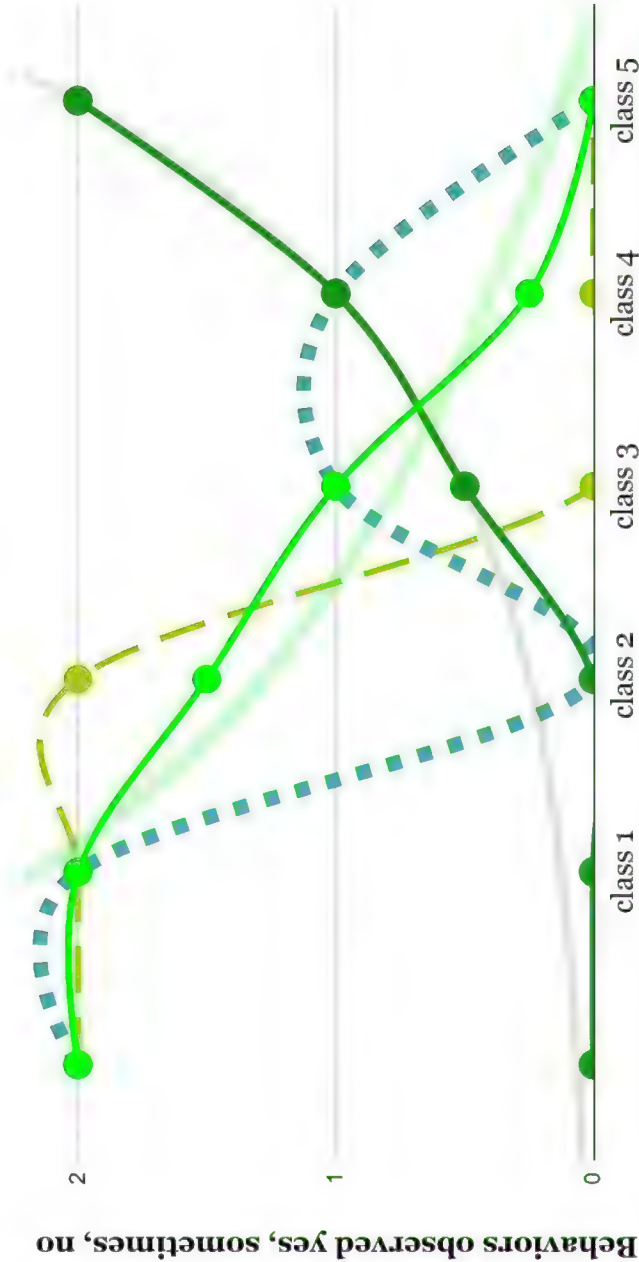


Observations During the Study

x Raptor use of negative self-talk ■ Raptor use SI

Raptor's Observational In-class Data After spending Extra Time with Teacher

0= Not observed 1= Observed Part of class 2= Observed whole class



In-Class Observations During the Study

- Worry
- Use of Negative Self-talk or other Maladaptive Behaviors
- Independent problem-solving
- Attention seeking behavior

Photo Log, Observational Protocol  
Student name: Raptor

#	Date	Type	Photographs and Notes
1	3/3	I	<div>Session I</div> 






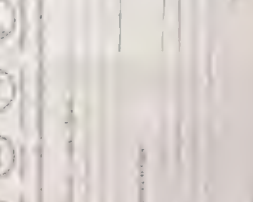
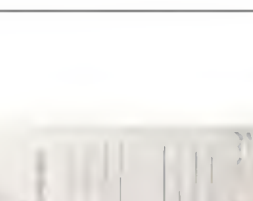

#	Date	Type	Photographs and Notes
2	3/8	C	

Raptors's Photo log    \*Type of session I- Individual Session, C- Class Session

#	Date	Type	Photographs and Notes
3	3/15	I	<div>  <p>2nd attempt</p> </div> <div>  </div>

Raptors's Photo log •Type of session I- Individual Session, C- Class Session

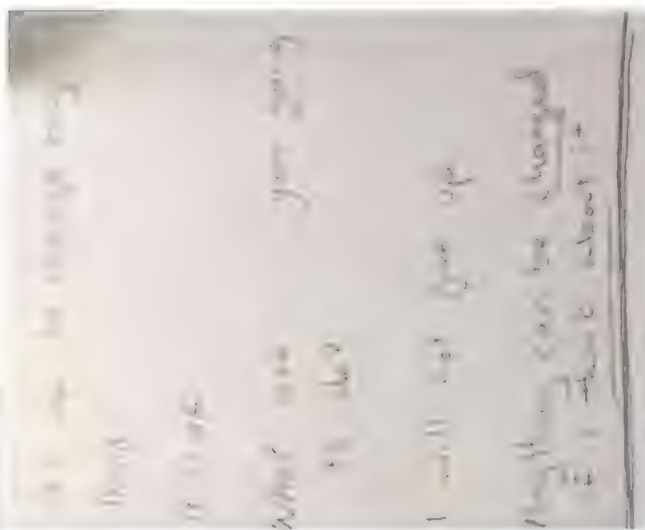


#	Date	Type	Photographs and Notes
4	3/16	C	
5	3/29	I	
			
			
			
			
			
			

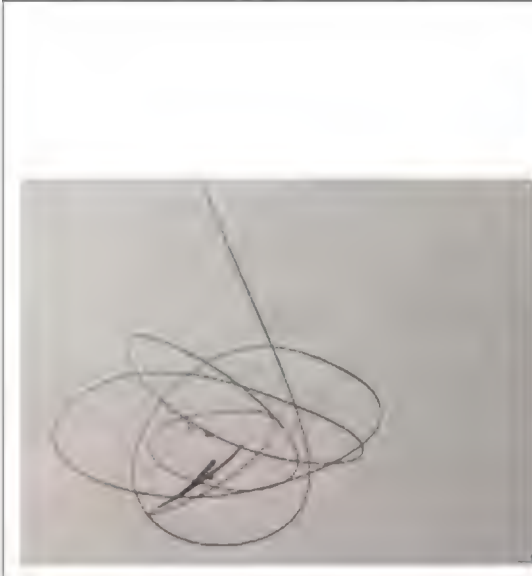

Raptors's Photo log • Type of session I- Individual Session, C- Class Session

#	Date	Type	Photographs and Notes
6	4/1	C	
7	4/5	I	<p>session 4 finished turtle</p>

Raptors's Photo log \* Type of session I- Individual Session, C- Class Session

#	Date	Type	Photographs and Notes
9	5/3	1	 <p>Sell statements</p>

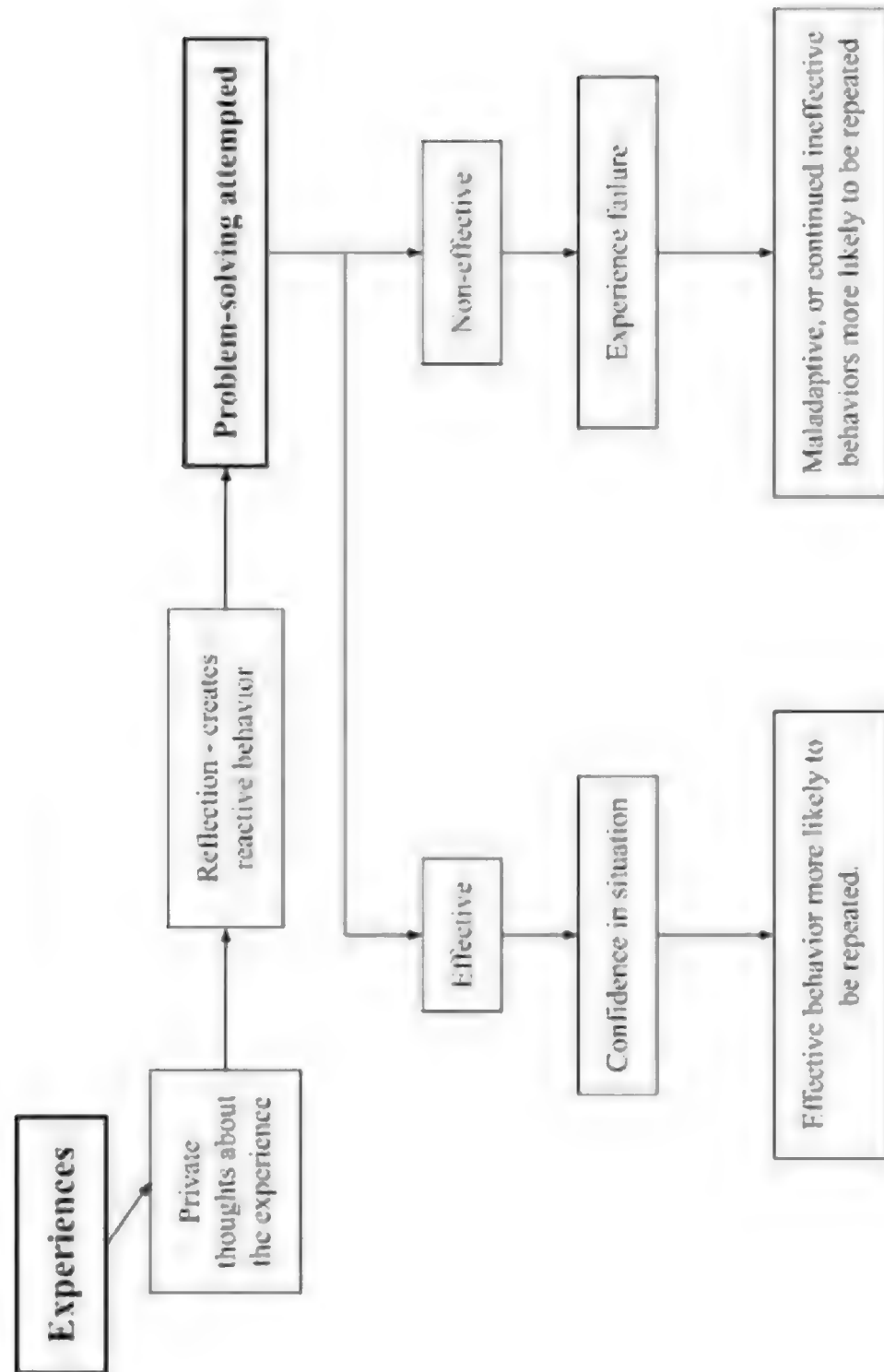
#	Date	Type	Photographs and Notes
8	4/18	C	

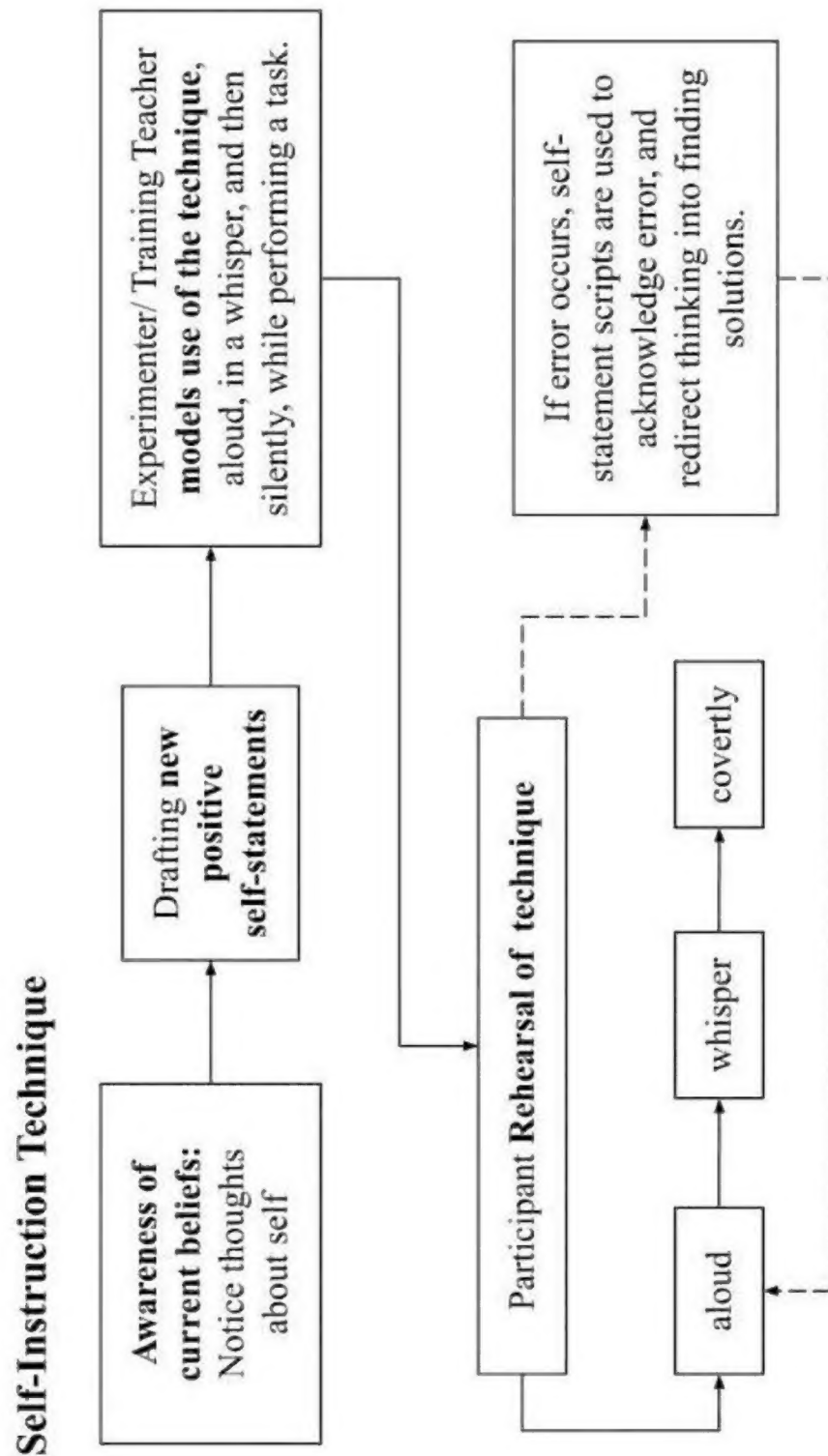
	

#	Date	Type	Photographs and Notes
1	4/19	1	<p>Session 5</p> 
0			

Raptors's Photo log • Type of session 1- Individual Session, C- Class Session

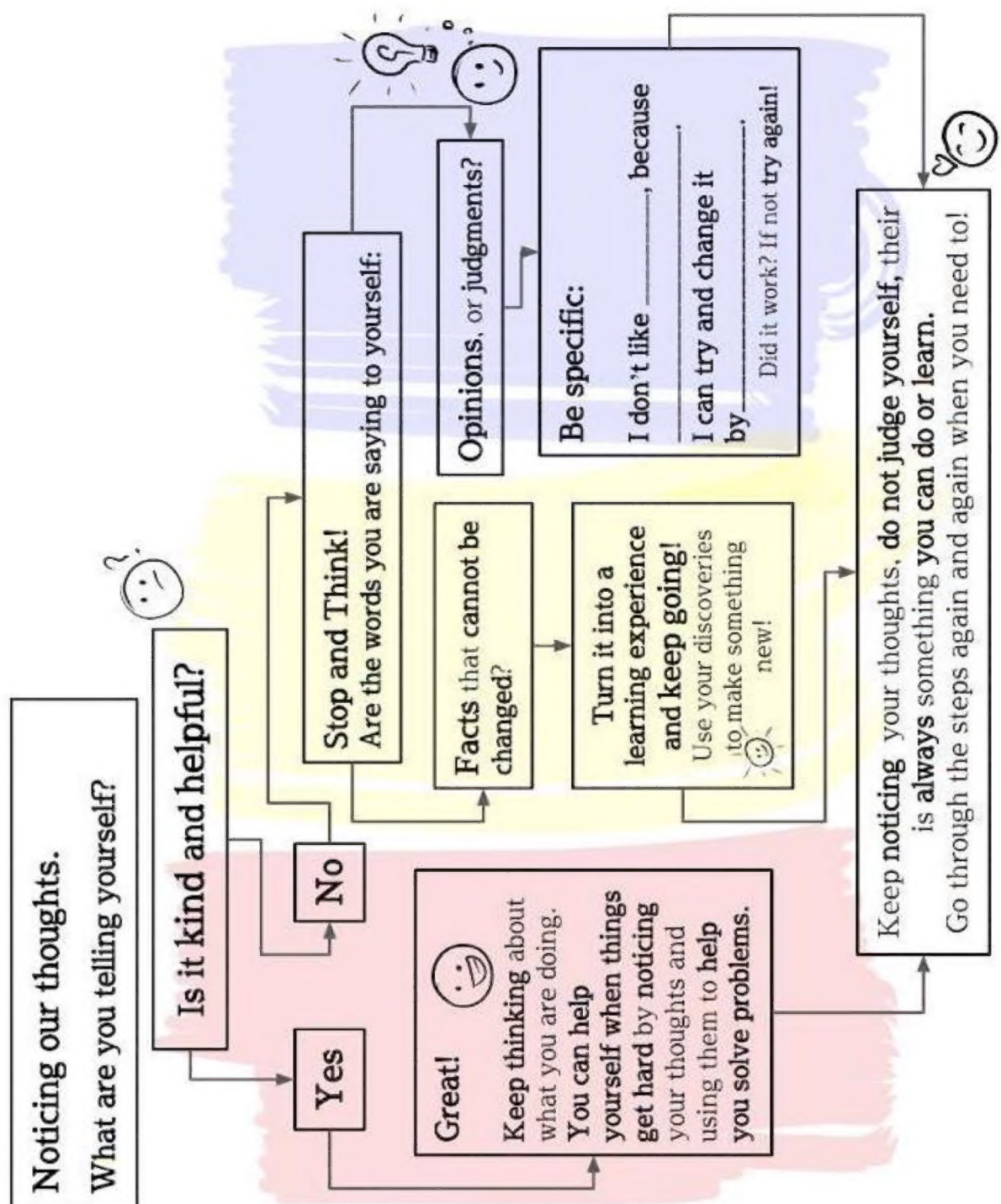
## APPENDIX I: Miscellaneous Resources

**Problem-solving Behaviors**

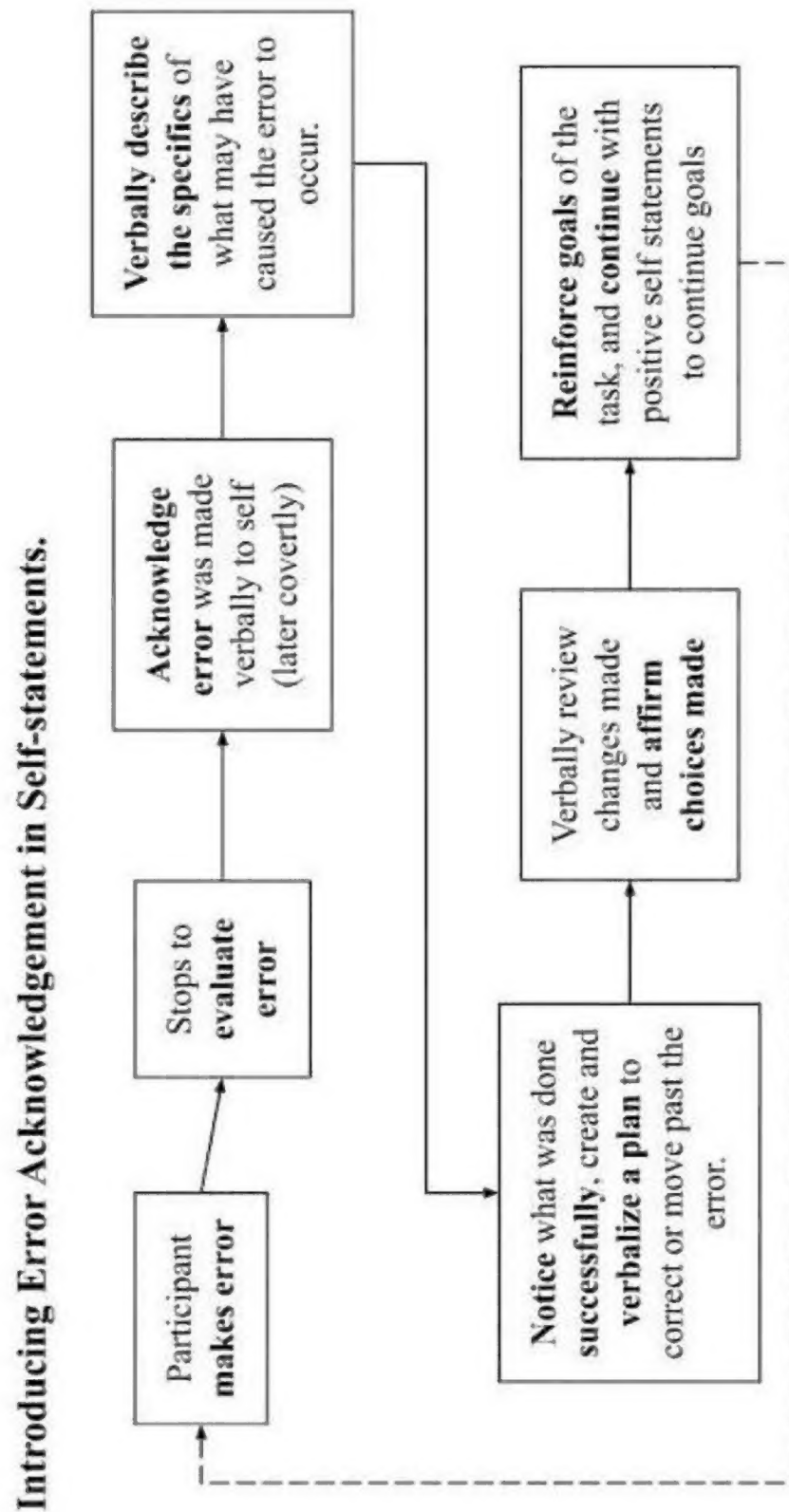
**Self Instruction Technique process - how SI works**

**Student Friendly description** used in class for all students, - missing the rehearsal element of SI.





**Error Acknowledgement Script process** - problem-solving, moving past, and solving mistakes made independently.



**Problem-solving using error scripts** - generalized poster/ slide for all students, prescription sentence starters.



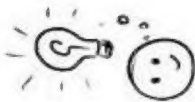
**I think I made a mistake** 😞

This is **what happened**, I was \_\_\_\_\_.

I don't like the result **because I feel it is** \_\_\_\_\_.

(Say **exactly** what is bothering you, say **facts**, no opinion words!

Think, When or where did your feelings change?)



**I can try to change** this part by \_\_\_\_\_.

(Talk yourself through it! You know yourself best.

☺ You have the BEST ideas for you!

Questions about materials or safety? Talk thought your **ideas with teacher/ classmates.**)

**Think. Did your change work?**

If not try again from the start! Don't give up!

**You've got this!**

